A Word from the Editors

Happy 30th Anniversary CCA! This issue of Cartouche is to celebrate the 30th anniversary since the inaugural meeting of October 18th 1975 in Camsell Hall in Ottawa. Five months previously, a small group of cartographers with a dream of creating a Cartographic Association that would appeal to the Canadian Cartographic Community met at Queen's University. These visionaries included Henry Castner, Fiona Cowles, Ron Curtis, Leonard Guelke, Bernard Gutsell, Audrey Leblanc, Gerald McGrath and Lou Sebert. Their vision finally came to fruition in October of that year when the Canadian Cartographic Association was officially formed at their first meeting in 1975.

We spent some time in the library to look at the past issues of our Newsletters to get some inspiration and can you imagine that the first CCA Newsletter was originally typed by Clifford Wood (our first editor)! Not only that, but it was on an IBM Selectric typewriter (Caution: this editorial may contain language which is unknown to many), then it was shot into negatives, stripped up, and printed on a one-color offset press! What a difference 30 years makes. From then on, as editors changed, so did the production technology used to prepare the Newsletter. Then finally after a change of name from Newsletter to Newsletter/Bulletin – A name truly fitting the significance of this Newsletter was chosen for the 15th Anniversary of the CCA. It was decreed that this Newsletter was from this day onwards to be called Cartouche! Cartouche has the same goals as the past Newsletter; that is as a forum to keep our membership connected and informed. We would like to sincerely thank all of the editors that came before us and set the stage. These are Clifford Wood (1982-1984); David Forrest (1984-1985); David Douglas (1985-1986); Roger Wheate (1986-1988); Gordon Shields (1988-1990); James Britton (1990-1994); Weldon Heibert (1994 – 1999) and Gary McManus (1999 – 2005). Weldon introduced the Cartouche masthead in the special issue in 1994. Each issue was part of the heart and soul of the each past editor and for this we would like to recognize and thank them. They have set the standard and built a strong foundation that we can build on.

We also wish all CCA members a very happy Holiday Season and may the New Year bring health, prosperity, love, happiness and especially peace to all. We also wish the Canadian Cartographic Association prosperity and success and that it will flourish for many more years to come.

Claire Gosson and Diane Lacasse

About the cover...

Many members have asked about the significance of the CCA logo. In this issue, you will find an explanation from Henry Castner that was originally published in Cartouche Number 5, Spring, 1992. Recently, Dr. Castner has added several other thoughts on the logo he designed.

Un mot des éditérices

Bon 30e anniversaire ACC! Ce numéro de Cartouche célèbre le 30e anniversaire de la création de l’Association qui eut lieu le 18 octobre 1975 à la salle Camsell à Ottawa. Cinq mois plus tôt, un petit groupe de cartographes qui rêvaient de créer une association cartographique qui rallierait toute la communauté cartographique canadienne, se réunit à l’université Queen’s. Ces visionnaires étaient Henry Castner, Fiona Cowles, Ron Curtis, Leonard Guelke, Bernard Gutsell, Audrey Leblanc, Gerald McGrath et Lou Sebert. Leur vision se concrétisa finalement au mois d’octobre de la même année lorsque l’Association canadienne de cartographie fut officiellement inaugurée au cours de la première réunion en 1975.


Nous voudrions aussi souhaiter à tous les membres de l’ACC une très belle saison des fêtes et puisse la nouvelle année apporter à tous la santé, la prospérité, l’amour, la joie et la paix. Nous souhaitons aussi à l’Association canadienne de cartographie la prospérité et le succès et qu’elle continue de grandir au cours de nombreuses années à venir.

Claire Gosson and Diane Lacasse

Au sujet de la page couverture

Plusieurs de nos membres se sont demandé qu’elle était la signification de notre logo. Dans ce numéro, vous trouverez l’explication de Henry Castner qui a déjà été publiée dans le Cartouche numéro 5, printemps 1992. Récemment, Dr. Castner y a ajouté plusieurs autres pensées au sujet de ce logo qu’il a dessiné.
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The Future of Cartography/ 
GIS and the CCA

As a relative newcomer to the world of formal Cartography and GIS, it is not possible for me to intelligently discuss the past of either the CCA or of my new-found profession. However, anyone with access to a crystal ball can prognosticate about the direction we will go from here, and with the dust polished off of mine I will offer my views of the future.

As the current president of the Canadian Cartographic Association, coming to the position as I do with many years in sales behind me, I would like to predict steady growth of the CCA and a strengthened industry resulting from great advances in technology. As a realist I fear my predictions will not be so rosy.

Over the past 30 years, the CCA has grown and shrunk numerous times - small, random blips superimposed on a large sine wave of growth and decline. A number of reasons for these changes have been postulated by CCA executive of late, but the truth is we have no way of knowing if the current downward trend has actually been halted or if the recent turnaround is merely one of the blips.

The CCA grew in the past as other organizations folded and we took in their disenfranchised. If an association is relevant to its members, they will do whatever it takes to keep the organization alive. Those other organizations had failed the relevancy test. If we are to ensure not only the survival of the CCA, but its future growth, one of our greatest challenges will be to ensure the relevancy of the CCA to all practicing map makers in Canada. Determining how to do this will be the toughest challenge of all.

Google-Earth™, mobile GIS (location based services), advances in cell phone technology, etc. have all changed the way the average person thinks about maps. In a world where “instant” everything seems to be the norm, “instant maps” will replace the detail that every good cartographer appreciates. Maps will become ephemeral - created on the fly for a specific purpose from vast databases of information and deleted when that purpose has been fulfilled. I fear the paper map will soon be relegated to collectors.

As an organization dedicated to:
- promoting interest in maps and related cartographic materials
- furthering the understanding and knowledge of maps by encouraging research in the field of cartography, both historical and current
- providing for the exchange of ideas and information and for the discussion of mutual concerns, through meetings and by publications
- advancing education in cartography and in the use of maps

It is incumbent upon us in the CCA to embrace new map technology and ensure that cartographers have as much say in its development as the computer programmers and data distributors. If we want to be relevant in the future of mapping we need to expand our horizons and perhaps rethink our notions of what a cartographer is. I would hazard a guess that most of us got into this profession because we were mesmerized with the beauty and detail in maps. We need to take our heads out of the sand and accept that cartography may never again be about beauty and detail.

The CCA currently has five special interest groups (SIGs): Analytical Cartography and GIS, Map Production Technology, Cartographic Education, History of Cartography, and Map Use and Design. Perhaps what the CCA needs at this time is a new SIG-one entitled Mapping the Future (or Mapping, the Future). Members interested in at least four of the five current SIGs might also find an interest in this new group. With such a SIG, the CCA could explore the future direction of map making, keeping its members abreast of changes to come, that they could steer a better course (rather than reacting to circumstances like the Titanic after the iceberg had been hit).

In June 2006, the CCA will share our conference in Ottawa with a host of new faces as we come together with GeoTec and other groups to celebrate the 100th anniversary of the Atlas of Canada. Here is our chance to recognize the past while we explore the future. As an association, we need to embrace that future, adapt to the changes in our map-related professions, and find ways to expand both our horizons and our membership base.

The CCA has an important role to play in the future of Cartography in Canada. Let’s be sure we will always be in a position to fulfill our mandate.
The CCA Logo

Dr. Henry Castner
Queen’s University (retired)
President 1981-1982

Physically, the CCA logo is made up of a regular icosahedron, a solid figure consisting of twenty equilateral triangles of the same size, within a regular dodecahedron, a solid comprised of twelve equal-sided pentagons. These are two of the five possible regular polyhedrons having congruent faces or facets, each a regular polygon, which meet at equal angles. The five regular polyhedrons are also known as the Platonic solids even though they were known to the Greeks before the time of Plato. The other three solids, which are less reminiscent of a globe, are the tetrahedron (with four equilateral triangles), the cube (bounded by six squares), and the octahedron (with eight equilateral triangles). The icosahedron carries the initials of the Association. Depending upon the orientation of the logo, one is able to read them clockwise from the upper left in the order “CCA” (Canadian Cartographic Association) or “ACC” (“l’Association canadienne de cartographie”). When the logos are displayed as a pair, both orientations should be used!

The most direct cartographic connection is, of course, with map projections—the representation of the sphere on the some kind of developed plane surface. The most obvious examples of this are Tissot’s indicatrix (which can be imagined as a solid before transformation made up of an infinite number of small circular facets) and Buckminster Fuller’s Dymaxion Air-Ocean Map—a developed or unfolded icosahedron. Both examples speak to the inexact nature of our science; the former being used as a measure of transformation error; the latter necessarily interrupts the earth’s surface when developed. But Fuller’s map was based on the positive idea that the twenty triangles could be positioned in various contiguous arrangements so as to reveal different global relationships. For example, the triangles can be arranged to show the universal world ocean even though this means that the land masses will be interrupted or placed on the periphery of the map—things we don’t normally do. The triangles can also be aligned along a great circle to depict some transcultural communication route or relationship. In other words, his map, by its very nature, can be used in any number of valid ways to reveal something about the earth.

Nowadays, the facets also remind us of the various polygons and pixels in data banks that carry thematic information of all kinds. Mapping, then, is much more than merely accounting elements of the physical landscape and major cultural features within it.

Less obviously, the icosahedrons suggest that many facets of cartography, some of which are practiced and represented by the Interest Groups of the Canadian Cartographic Association. Collectively, the facets define our cartographic “world”. The reference to the Fuller Map suggests an organization which is open to experimentation and change, and one which takes a flexible and open approach to the development of ideas about cartography. Placing the icosahedrons within the dodecahedron reminds us that while we are a “world” of our own, we also operate within other “worlds”. These two solids are complete because cartography, in one way or another, impinges on all other areas of intellectual inquiry. Thus there are potential interactions between aspects of cartographic theory and practice and those of other groups whose words are defined by different intellectual pursuits, practical activities, or hierarchical regions of geographic operation.

In looking back over nearly 30 years since the CCA’s logo’s initial design, one hopes that the original philosophical remarks about it are still valid. The reference to the Fuller Map suggested a flexible organization, one open to experimentation and change. The reference to the faceted figures suggested the many aspects of cartographic thought and practice, many of which are explored and represented by the Interest Groups of the CCA. But one remark that only later came to mind was that the icosahedron is transparent, i.e., you can see through it. Some professional organizations seem to be quite the opposite—they are opaque to ideas and participation. But in an open association such as ours, one can always see what is happening and identify opportunities for service. These are attributes which help things run smoothly and assist an association in remaining vital, growing, and maturing. Let us hope that these aspects of the Association will no change.

The logo did undergo a reformulation a few years ago to facilitate its life in digital/cyber space. As a result the logo acquired a full color front facet which reduced the three dimensional illusion that was sought in the original design. The design principle here is that the more distant or curved the surface, the darker it would be depicted. Thus the logo should have a clear front facet for the icosahedron. Also, there seems to be a tendency to use only one variation of the CCA/ACC combination. In so doing, we may be failing to confirm our commitment to a bilingual organization representing all Canadians.

On another front, the icosahedron lives on as a developable world map projection for children entering the Barbara Petchenik Children’s Map Design Contest, sponsored by the ICA. A
CCA Recollections

Dr. Mark Monmonier
Syracuse University's Maxwell School of Citizenship and Public Affairs

The thirtieth anniversary of the Canadian Cartographic Association is this year. Amazing! It doesn’t seem that long, but the math is straightforward, and I was there at that first meeting in Kingston in 1975. The memory is vague, as events this distant often are, but I recall an engaging technical program and a cordial banquet with Gerald McGrath and some family members in full Scots regalia and someone (Gerald perhaps) playing the bagpipes. I attended several other CCA meetings over the years, typically those in Ontario (Ottawa in 1976, London in 1983, and Waterloo in 2002). All were well-run, and I should have gone more often, but I’ve never been big on conferences.

In some ways, the CCA is even older insofar as academic societies typically form first and start a journal later. Bernie Gutsell started a spunky little journal he initially called The Cartographer in 1964 and renamed The Canadian Cartographer in time for its fifth volume, dated 1968. (Whether it was actually printed that year is hard to say—cartographic journals often get behind and Bernie’s journal, a true labor of love, not only had its share of delayed issues but started a trend occasionally embraced by its counterparts down in the States.) In any event, it was natural and mutually convenient for the CCA to adopt Bernie’s journal and guarantee continuity after he stepped down as editor.

It’s good to see the CCA hold onto the “Cartographic” in its name. And even though The Canadian Cartographer is no longer on the masthead of its journal, the shift to Cartographica in 1980 not only retained the word root but conveniently squelched librarians’ confusion over the journal and its monograph series. Whether this resistance to re-labeling shows courage or stubbornness is difficult to say, but I applaud it. The journal I had served as associate editor and editor, The American Cartographer, renamed itself Cartography and Geographic Information Systems in 1990 and replaced the “Systems” with “Science” in 1999. (Does it matter? What’s next? Perhaps just Cartography and Geographic Information? Cartology would be concisely refreshing.) Resisting superficial strategies for expanding market share, Cartographica continues to cover the field’s science as well as its art, design, history, and public policy. It’s as welcome in my mailbox as any other publication, and more than most. And as newsletters go, the informative and occasionally quirky Cartouche is among the best.

I can imagine the pressure to rename the CCA now that the International Cartographic Association seems to be caving in. There must be a better way to leave one’s mark on a useful and respected organization.

Some “Unforgettable Moments”
During the Last 29 Years of Membership in the CCA

Dr Clifford H. Wood
Professor (retired)
Memorial University of Newfoundland
President 1985-1986

Although I joined the Canadian Cartographic Association in 1976 while a grad student in Madison, WI, I really didn’t get involved with the CCA until after I had moved to St. John’s, NL in 1977. My first taste of who the movers and shakers were came when Gary McManus and I traveled to Montreal in 1980 to attend the Annual General Meeting there. My memories of the first “ice-breaker” are still firmly rooted in my subconscious. First of all, I was a bit dubious about my lack of any ability with the
French language and wondered if some of the speakers would be speaking in English – thankfully there were. In all it was a good meeting, but what really set it off was a sterling performance by Professor Dr. R. Norman Drummond who held us all spellbound at the “ice-breaker” for nearly 45 minutes, regaling us with one of the Wittiest monologues (in both languages) that would shame even Jay Leno. He had everyone rolling with laughter. In the subsequent 25 years, I have never forgotten that wonderful occasion. Much to my good fortune, I had the distinct pleasure to work many times on various projects with Norm over the next several years and grew to respect, admire, and love that man. Alberta and I were guests of Pat and Norm on a few occasions at their home in Point Claire, PQ. They were always such gracious hosts.

Some five years later at the 10th Annual General Meeting at the University of New Brunswick in Fredericton, I had another significant opportunity to be in the company of Professor Dr. George Jenkins, University of Kansas. Although I had met George earlier on a couple of occasions both professionally and socially before moving to Canada, the 1985 CCA meeting was the first time I remember George in attendance at one of our AGMs. During several of the paper sessions I recalled that George would ask such penetrating questions of the speakers, many of whom would not know exactly how to respond. To say that George was a bit curmudgeon-like would be an understatement, but all in attendance and especially those who were still to give their papers, realized that they had better be sharp. As a result, the sessions were filled to capacity just to see how George would skewer any speaker who wasn’t up to his expectations.

A scant two years later at the 1987 Annual Meeting in Quebec City, I met a new member (new to me at the time) by the name of Professor Dr. C. Peter Keller, currently Dean of Social Sciences, University of Victoria. During the last 18 years, Peter and I have forged a great and wonderful working relationship, collaborating on several projects and enjoying every one of them. I can state without any reservation whatsoever that meeting Peter in Quebec City was a stroke of good fortune, maybe for the both of us.

It was also at this 1987 meeting that the CCA Executive Committee was looking for a banquet speaker, someone who could speak both languages. No one volunteered, no one that is, until Professor Dr. Robert Packer, University of Western Ontario, said that he would be happy to address the delegates, and in both languages. Bob did, however, qualify his agreement to deliver his talk in French, but only after a few single malt scotch to “loosen up his French.” Bob did a masterful job of entertaining the gathered throng. It was an unforgettable banquet address.

It has been an equally unforgettable experience just being part of a great group of people who collectively make the Canadian Cartographic Association what it is. My hat is off to each and every one of you.

**Un moyen de réunir les personnes intéressées à la cartographie, même si elles vivent loin des grands centres**

Dr Majella J. Gauthier  
Professeur émérite  
Université du Québec à Chicoutimi  
Président 1992-1993

1 Premiers contacts avec l’Association canadienne de cartographie (ACC)  

Mon collègue Louis-Marie Bouchard et moi avions présenté le contenu de ce que le projet avait produit à ce moment-là devant plusieurs dizaines de personnes dont on ignorait l’existence et que l’on voyait pour la première fois. Ce fut, surtout pour moi, un coup de foudre. Rencontrer des personnes qui partageaient la même passion, les mêmes intérêts, les mêmes rêves. Provenant de divers milieux d’activité: universitaire, collégial, gouvernemental, professionnel, étudiants; et pas uniquement provenant du Canada. Il est vrai que nous étions à produire le premier (et le seul!!) atlas général sur une région du Québec, bien que l’Atlas de l’Est du Québec ait fait auparavant un petit pas dans cette direction.

L’Atlas régional du Saguenay-Lac-Saint-Jean fut publié en 1981 après huit ans de gestation. En effet, c’est...
plutôt long de monter une équipe, de courir après les subventions, de passer de la plume Le Roy au tracé sur couche, d’apprendre à jongler avec les techniques de la nouvelle géographie (quantitative, modèles d’analyse), comprendre les subtilités de l’imprimerie en quadrichromie, enfin...

Nous avons reçu, lors de cet exposé à Vancouver, un encouragement pour l’originalité et surtout à poursuivre l’immense aventure dans laquelle ces inconnus s’étaient lancés. La vente eut un succès régional certain et on retrouve le document dans plusieurs bibliothèques du Canada et d’ailleurs. J’ai le souvenir qu’au début des années ’80, les autorités de la région du Saguenay-Lac-Saint-Jean ont remis au Premier Ministre de France, Pierre Mauroy, lors de sa visite dans la région, un présent d’honneur, soit une copie de l’atlas relié en peau d’original dans un coffret confectionné avec la peau de ce même animal. C’est flatteur n’est-ce pas ? D’autant plus que le récipiendaire était professeur de géographie et d’histoire.

Par la suite, l’équipe de Chicoutimi, surtout à partir de 2000, s’est mise à la réalisation d’un atlas électronique sur Internet2 étudiant la même région en rafraîchissant les données de l’atlas précédent et en y ajoutant des informations nouvelles. Il faut dire que c’est un projet dont nous avons déjà parlé au moment des réunions annuelles, un projet qui continue toujours et sur lequel nous reviendrons ultérieurement dans un autre numéro du Cartouche3.

2 Cartographie dans les médias

En 1986 avait lieu l’Exposition internationale de Vancouver. L’ACC en a profité pour organiser une autre rencontre annuelle à cet endroit. J’étais alors président du Groupe d’intérêt sur la conception cartographique. C’était le moment rêvé d’organiser une séance spéciale sur le thème que j’avais proposé deux ans auparavant: la cartographie dans les médias. Certains ont dit que nous avions réalisé un coup de maître. En effet, réunir autour d’une table, ce que l’on pourrait appeler, des experts de la question, était du jamais vu:

Hal Aber, Directeur de la division cartographique à la National Geographic Society, Serge Bonin, directeur du Laboratoire de graphique (Paris), Roger Black, Directeur d’arts graphiques à Newsweek Magazine, Patricia Gilmartin, professeur à l’University of South Carolina, Jean-Daniel Gronoff, Centre d’analyse et de mathématiques sociales (Marseille), Stephen Hume, Rédacteur au Edmonton Journal, Ib Ohlsson, Chef-cartographe à Newsweek Magazine, Paul Pugliese Chef-cartographe à

8 Cartouche

Number 60


The principal speakers at the time of the special session on the cartography in the media at Simon Fraser University in 1986. From left to right: Roger Black, Hal Aber, Majella-J. Gauthier, Stephen Hume, Paul Pugliese, Patricia Gilmartin, Jean-Daniel Gronoff, Serge Bonin and Ib Ohlsson.

Time Magazine et votre humble serviteur (voir la photographie). Les exposés furent remarquables et les discussions excitantes. Si bien que le tout fut couronné par la publication des Actes, qui selon nos informations, fut la première (sic) publication au monde consacrée au sujet4.

3 Concours de cartographie pour les étudiants

L’une des activités de l’association à laquelle les étudiants de Chicoutimi ont participé souvent fut les concours de création cartographiques. J’ai eu la chance d’enseigner à de futurs géographes pleins d’aptitudes et d’intérêt. Je les incitais à s’investir dans des travaux pratiques en design cartographique: conserver un projet, déterminer un sujet traitable par des cartes (bien souvent dans un style journalistique), dessiner la carte, la peaufiner
en vue d’un produit digne du niveau de compétition exigé par l’association.

Le sort a favorisé très souvent les étudiants de Chicoutimi et je me demande s’ils n’ont pas (toutes proportions gardées) obtenu des résultats aussi bons sinon meilleurs que d’autres établissements scolaires. Ils ont découvert le plaisir de passer par les étapes de la composition cartographique et d’arriver à un produit fini de haute qualité. Ce qui me réjouit le plus aujourd’hui, c’est de voir que la très grande partie des étudiants qui ont mérité des prix (dont celui de Times Magazine) a poursuivi ses études aux niveaux gradués et/ou a obtenu des emplois facilement. (ils avaient en poche une belle “carte de visite”!).

4 Une famille

L’ACC est pour moi comme une famille, un groupe de gens avec qui on se sent bien, avec qui on peut discuter de choses sérieuses relatives à la discipline et avec qui on peut se déten dre notamment lors des réunions annuelles. J’ai eu le plaisir de siéger à l’exécutif de l’association notamment en tant que vice-président, président et président sortant. Ceci m’a permis de m’impliquer dans la destinée de notre groupe et de raffermir les liens professionnels et d’amitiés avec plusieurs membres.

Je m’en voudrais de ne pas souligner le soutien, l’aide et l’encouragement que m’ont prodigués plusieurs des membres de l’association. Deux d’entre eux doivent être mentionnés: Cliff Wood de l’Université Memorial et le regretté Norman Drummond de l’Université McGill.

Félicitations à tous ceux et celles qui ont vu à animer l’ACC depuis ces 30 ans.

Qu’elle puisse vivre encore longtemps.

Notes:
4 - GAUTHIER, M.-J. (Editor) (1988), Cartographie dans les médias / Cartography in the media, Québec, Presses de l’Université du Québec, 121 p.
presented to the Prime Minister of France, Pierre Maurois, at the time of his visit in our area, a special gift: a copy of our Atlas bound in moose hide and in a box also made of the hide of this same animal. It is flattering isn't it? This made it more special since the recipient was also a professor of geography and of history.

Thereafter, the Chicoutimi team, especially from 2000, started producing an Atlas électronique sur l'Internet looking again at the same region with more recent data than the previous atlas while adding to it new information. It should also be mentioned that this project was presented at a number of CCA conferences. This project continues and we will come back to it in the future with an article in another issue of Cartouche.

2. Cartography in the media

In 1986, the International Exhibition took place in Vancouver. The CCA took advantage of this event to organize another annual meeting in Vancouver. At this time, I was the Interest Group Chair of Map Use and Design. It was a moment that I had dreamed of; to organize a special meeting on the topic that I had proposed two years before: cartography in the media. Some said what we had achieved was a stroke of genius. Indeed, to gather around a table, what one would call, a number of experts in the field could not be imagined: Hal Aber, Director of the Cartographic Division of the National Geographic Society, Serge Bonin, directeur du Laboratoire de graphique (Paris), Roger Black, Director of Graphic Art, Newsweek Magazine, Patricia Gilmartin, Professor, University of South Carolina, Jean-Daniel Gronoff, Centre d'analyse et de mathématiques sociales (Marseille), Stephen Hume, Writer for the Edmonton Newspaper, Ib Ollsson, Chief-Cartographer, Newsweek Magazine, Paul Pugliese Chief-Cartographer, Time Magazine, and your humble servant (see photograph). The presentations were remarkable and the discussions exciting. The crowning achievement of this hugely successful session turned out to be the publication of the proceedings, which according to our information, was the first time (sic) there was a publication in the world that was devoted to this subject.

3. Contests of cartography for the students

One of activities of the Association which the students from Chicoutimi often took part in was the Cartographic awards contests. I had the opportunity to teach future geographers who had a lot of talent and interest. I encouraged them to invest themselves in practical work in cartographic design: to create a project, to develop a subject that can make use of maps (very often, in a journalistic style), to draw the map and to polish it so that their work could be worthy of being entered and to compete to the level of standard set by the Association.

The students from Chicoutimi received many honours when they entered the CCA cartographic contests, and I sometime ask myself (but I might be just a little biased) if their results were as good if not better than other academic institutions. They discovered the pleasure of going through every stage of cartographic works and achieving results of superior quality. What delights me today is to see that many of my students who received these awards (like the Time Magazine award) have gone on to the graduate level and/or have easily found good employment. (They had in hand a very good calling chart!)

4. A family

The CCA is like a family for me; a group of people that one can feel very comfortable with and with whom we can discuss serious matters relating to our discipline, while still having a good time, especially during the annual meetings. I had the pleasure of serving on the executive of the Association in particular as Vice-President, President and Past-President. This allowed me to participate in the destiny of our group and to reaffirm the professional bonds and friendships with many members.

I would be inconsiderate if I did not acknowledge the support, the assistance and the encouragement that I received from many members of the Association. Two of them must be mentioned in particular, they include Cliff Wood of Memorial University and the late Norman Drummond of McGill University.

Congratulations to all who had the opportunity to give life to the Association over the past 30 years.

May the Association continue for a long time!

Notes:
4. GAUTHIER, M.-J. (Editor) (1988), Cartographie dans les médias/Cartography in the media, Québec, Presses of the Université de Québec, 121 p.
A Very Brief History of the CCA’s First Year (1975-76)

Roger Wheate
(with corrections and contributions by Henry Castner)
University of Northern British Columbia
President 1999-2000

The CCA’s founding is documented in the Cartographic Commentary section of the Canadian Cartographer (1975, 1976) and in Henry Castner’s opening address at the 2005 annual conference, reprinted in Cartouche 59.

An initial meeting convened by Bernard Gutsell on May 28, 1975 at York University, hosted a ‘group of eight’, with Lou Sebert as first secretary and government liaison; these two founders later became our honorary members. The Association was formally born at an inaugural meeting in Ottawa, October 18 1975, with 82 attendees. Janusz Klawe (University of Alberta) was elected the first president, and Gerald McGrath first vice-president.

The first annual meeting was held at Queen’s University, Kingston, 17-18 May 1976, organised by Henry Castner and Gerald McGrath. There were three sessions, followed by the development of Interest Groups, which were similar to those today except that Map Use and Map Design were two separate groups, their later merging enabling the creation of a new group ‘Analytical Cartography and GIS’. At the business meeting Gerald McGrath was acclaimed President, with Ross MacKay and Lou Skoda as first and second vice-presidents. The Canadian Cartographer was adopted as the CCA’s official journal.

In the previous month, there was in fact a ‘national scale’ conference, also at Queen’s University, April 23-24, organised by Richard Ruggles and attended by 27 historical cartographers, where they unanimously voted to ‘become’ an interest group within the CCA. Appropriately then, the history of cartography interest group predates the others by about four weeks.

In the intervening 30 years, the CCA has held annual meetings in every province, except Saskatchewan (to be addressed this decade) and PEI, albeit no territories (although chartered flights to Yellowknife and Whitehorse have been envisaged during lubricated discussions). They include joint meetings with the Association of Canadian Map Libraries and Archives, Canadian Association of Geographers, Canadian Institute of Surveying and Mapping, Carto-Québec, International Cartographic Association, North American Cartographic Information Society, Ontario Institute of Chartered Cartographers, Pacific Institute of Cartographers Society and the Western Association of Map Libraries. Our presidents have equally come from the same eight provinces above, except for New Brunswick, but including the large territory to our immediate south, where we have also briefly migrated to Syracuse for part of an annual conference.

A Time for Reflection

Ute J. Dymon
Kent State University
President 2002-2003

Recently I looked at my journals and Cartographica hit my eyes. This is when I realized that I have been receiving this journal since 1974. Going down memory lane, I thought back to how my advisor Ron Eastman encouraged me to attend meetings and present papers at the annual CCA meetings. After a few meetings I made friends, shared common interests with my Canadian colleagues and started to attend the CCA meetings more regularly. In the early ’90s, I started taking an interest in the organizational part of the CCA and became a member of its executive. I always felt strongly that we have to embrace and involve students and young professionals into the Association. Thinking of my
own experience, it was my advisor encouraging me to participate in the CCA activities that was the key to my decision to join. I gave my students the same encouragement after I filled a faculty position at the university level. At that time Cartographica was so far behind that none of my students actually received a copy before they left the University. While I was on the executive, the two things I wanted to improve were the timeline for Cartographica and the addition of new members into the CCA. I was not successful in making the delivery of Cartographica timely during my leadership as President of the CCA; however, I was thrilled to see my fall of 2005 copy arriving a few weeks ago. Congratulations to the three editors for a job well done. My concern about membership led me to write a letter to all university members to encourage them to ask students to participate in CCA meetings and to present papers as well as to consider membership. We saw a slight rise in our membership after the Victoria Meeting.

Cartouche recently received a facelift making the newsletter more desirable to read. I personally enjoyed reading about my colleagues and friends and seeing the pictures from the last annual meeting and felt pleased to be part of the CCA. I feel the CCA is in a strong position right now with a very respectable journal, Cartographica, and a renewed interest in Cartouche. In the last issue of Cartouche, Henry Castner outlined our future strength by calling on the CCA to communicate further with the “Unfranchised Cartographers”, to identify and embrace them into our Association.


Who in the World is Norman Nicholson?

Claire Gosson
Senior Geographer
GeoAccess Division, Atlas of Canada
Natural Resources Canada
President 2003-2004

I realized over the past few years that many of our younger CCA members might not know about Norman Nicholson. We know that the CCA established a student award in the memory of Dr. Nicholson in 1986. This award is given to a student to recognize their exceptional academic achievements and abilities in many aspects of cartography.

Since its creation more than 28 years, many worthy students and now CCA members have received this award. I did not personally know or ever meet Dr. Nicholson, since I arrived at the Atlas of Canada many years after his departure from the Department and the publication of the 3rd edition of the National Atlas of Canada.

Dr. Nicholson passed away in 1984 after a courageous battle with cancer. The profession of geography and cartography lost one of its brightest stars.

Norman Nicholson was a native of England who came to Canada with the Royal Air Force (RAF) during World War II.
While stationed in Canada, Mr. Nicholson completed his University of London degree, which had been interrupted by the war, at the University of Western Ontario. After the war he returned to London, Ontario to complete a graduate degree in Geography, and soon after became a member of the staff.

In 1949 Mr. Nicholson was offered and accepted the post as Director of the Geographical Bureau; later re-named the Geographical Branch of the Federal Department of Mines and Technical Surveys. Mr. Nicholson received his Ph.D. in Geography from the University of Ottawa during that time. The Geographical Branch was the envy of geographers throughout the world as a place to work since it was one of the few government department that hired Geographers, and Geography students during the summer, to do meaningful geographic research. This geographic research was then published in the Geographical Bulletin, which was edited by Dr. Nicholson. Many young Canadian Geographers of the time gained their experience with the Geographical Branch and Dr. Nicholson.

The aim of the Branch was to ensure the availability of many types of geographical information. More attention was being paid to the lack of available geographical information after the Second World War, particularly for the northern areas of Canada. There was also a greater recognition of the value of such intelligence as a basis for public awareness and sound national planning.

As a result the third edition of the Atlas of Canada was started in the early 1950s. One of Dr. Nicholson’s major contributions was the production of a 3rd edition of the Atlas of Canada in 1957 to replace the earlier editions in 1906 and 1915. Dr. Nicholson was the Editor-in-Chief of this Atlas. It was first published in 1957 in English then published in French in 1958, making it the first bilingual Atlas of Canada. Dr. Nicholson and the Geographical Branch received a number of major internal government department awards for their research and work on the 3rd edition. The Geographical Branch also supported Geomorphologic Research particularly on Baffin Island, the Railway Rationalization in the Prairies, Ice conditions in Baffin Bay, and Coastlines in the Maritimes. If it was Canadian Geographical research, it was supported by the Geographical Branch. He was an esteemed civil servant who was very adept in dealing with government bureaucracy and in this way, achieved so much through the Geographical Branch.


In 1961, the University of Western Ontario convinced Dr. Nicholson to return to the University as a senior professor of Geography. Dr. Nicholson was never happier than when he was in the classroom and teaching, but the University needed an experienced administrator, and the post of Principal of University College was offered to him. While there he was well regarded as someone who would support with funding some disciplines which normally had little access to research funds. He became Assistant Dean of Graduate Studies and then moved to Althouse College.

Dr. Nicholson felt that he needed more, especially in the field of education; therefore he took a second doctorate at the Ontario Institute of Secondary Education. Finally the Geography Department of the University of Western Ontario attracted him back to the University as the Chairman for three years. During this time period, Dr. Nicholson still managed to write with Lou Sebert to definitive work on Map of Canada in 1981.

Dr. Nicholson had a special gift in mapping and cartography. As editor-in-chief of the Atlas of Canada, he set a standard for National Atlases that has been recognized and honoured for decades. His research and publications on mapping and the importance of boundaries are among the best in the field. Because of Dr. Nicholson, many young geographer and cartographers became more skillfully competent in understanding the meaning of geographical knowledge in a country like Canada. His service to the profession of Geography and Cartography is unparalleled.

The following is a list of CCA recipients of the Norman Nicholson Memorial Scholarship from 1987 to today:

2004 – John Fowler, University of Victoria  
2000 – JoAnne McIntyre, COGS  
1999 – Tammy de Pass  
1997 – Andrew Millward, University of Guelph
The following is a list of the CCA recipients of the Norman Nicholson Memorial Scholarship from 1987 to today:

2004 – John Fowler, University of Victoria
2000 – JoAnne McIntyre, COGS
1999 – Tammy de Pass
1997 – Andrew Millward, University of Guelph
1996 – Sharron Barnes, Brock University
1992 – Gary Mark Murkowski, COGS
1991 – Heather Nicholson, Sir Sandford Fleming College
1989 – Monika Rieger, University of Calgary
1987 – Derrek Peddle, Memorial University of Newfoundland

If you have a good look at the names on this list of Nicholson Award recipients, you will recognize many young CCA members who today are still very active in the Association. These young people are our future and we must support them along as Dr. Nicholson did for so many of us in the past. It is very important that all CCA members who are in an Academic Institution, the government, private industry, or elsewhere, to follow the example set by Dr. Nicholson and promote Cartography and Geography to their students, and young co-workers, and encourage them to become members of the CCA so that they can attend our meetings, read *Cartographica* and *Cartouche* and have the opportunity to connect with other CCA members who can pass along their passion for Cartography to these young people. We need to prepare for the future and be ready to pass on the torch to this younger generation. Dr. Nicholson never forgot his role as mentor and we should not let his legacy go “softly into the night” (*Shakespeare.*)

**In Memoriam**

Clifford H. Wood, Ph.D
Professor (retired), Memorial University
Co-Editor, *Cartographica*

During the first 30 years of the Canadian Cartographic Association’s existence, we have witnessed many transitions in our profession from digital mapping, metadata, GIS, GPS, hyper links, the World Wide Web, and the list goes on. None of these transitions, however, are as noteworthy as the passing of some of the giants in our fields. The list of names below (my apologies for any omissions) reflects young and old, well-known and less well-known, Past Presidents of the Canadian Cartographic Association and others who have made significant contributions. I have had the privilege of knowing all of them. It is with deep respect that we honor them in this, the 30th Anniversary issue of our newsletter, *Cartouche.*

Elaine Bosowski  
Raymond Boyle  
Malcolm Brown  
Eila M. J. Campbell  
Robert Churchill  
Richard E. Dahlberg  
Norman Drummond  
Marcia Faurer  
John Garver  
Gerhard Gloss  
George Jenks  
Jaruszh Klawe  
Y.C. Lee  
Norman Nicholson  
Robert Packer  
Barbara Petchenik  
Arthur Robinson  
Lou Sebert  
Helen Wallis  
Ron Whistance-Smith  
David Woodward
## Presidents of the CCA 1975-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>President</th>
<th>Affiliation</th>
<th>Conference (joint with)</th>
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<tbody>
<tr>
<td>2005</td>
<td>Rick Gray</td>
<td>Ridgetown College</td>
<td>Ottawa (ACMLA, CKG, GeTec)</td>
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<td>2004</td>
<td>Christine Earl</td>
<td>Carleton University</td>
<td>Memorial University of Newfoundland - ACMLA</td>
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<td>2003</td>
<td>Claire Gosson</td>
<td>GeoAccess Division, NRCan</td>
<td>Fleming College</td>
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<td>2002</td>
<td>Ute Dymon</td>
<td>Kent University - Ohio</td>
<td>University of Victoria - ACMLA - CAG</td>
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<td>2001</td>
<td>Patricia Connors</td>
<td>Cartologique</td>
<td>Wilfred Laurier University</td>
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<td>2000</td>
<td>Michel Fournier</td>
<td>University of Northern British Columbia</td>
<td>University of Alberta - ACMLA</td>
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<td>1999</td>
<td>Roger Wheate</td>
<td>University of British Columbia</td>
<td>Ottawa (ICA 1999) - ACMLA</td>
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<td>1998</td>
<td>Brian Klinkenberg</td>
<td>Memorial University of Newfoundland</td>
<td>University of Western Ontario</td>
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<td>Gary McManus</td>
<td>University of Guelph</td>
<td>Memorial University of Newfoundland</td>
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<td>1996</td>
<td>Janet Mersey</td>
<td>Brock University</td>
<td>University of Toronto</td>
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<td>1995</td>
<td>Marcia Faurer</td>
<td>University of Winnipeg</td>
<td>University of Montreal</td>
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<td>1994</td>
<td>Ahim Hughes</td>
<td>Brock University</td>
<td>York University</td>
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<td>1993</td>
<td>Majella Gauthier</td>
<td>Université de Québec à Chicoutimi</td>
<td>Québec (Carto-Québec)</td>
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<td>1992</td>
<td>Peter Keller</td>
<td>University of Victoria</td>
<td>University of British Columbia</td>
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<td>1991</td>
<td>Claudette LeBlanc</td>
<td>NS - LRIS</td>
<td>Fredericton - New Brunswick</td>
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<td>Jean Carrière</td>
<td>UQAM</td>
<td>London, Ontario</td>
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<td>Norman Drummond</td>
<td>McGill University</td>
<td>University of Calgary</td>
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<td>Christopher Gold</td>
<td>Memorial University of Newfoundland</td>
<td>Lindsay, Ontario</td>
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<td>Malcolm Brown</td>
<td>University of Manitoba</td>
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<td>1986</td>
<td>Clifford Wood</td>
<td>Memorial University of British Columbia</td>
<td>Montréal, Québec</td>
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<td>Michel Rholt</td>
<td>Université de Sherbrooke</td>
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<td>David Douglas</td>
<td>University of Ottawa</td>
<td>Vancouver, B.C.</td>
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<td>Michael Coulson</td>
<td>University of Calgary</td>
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<td>1982</td>
<td>Henry Castner</td>
<td>Queen’s University</td>
<td>Kingston</td>
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<td>1981</td>
<td>Ray Boyle</td>
<td>University of Saskatchewan</td>
<td>Cansell Hall - Ottawa</td>
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<td>Fraser Taylor</td>
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<td>Fraser Taylor</td>
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<td>1978</td>
<td>Leonard Guelke</td>
<td>University of Waterloo</td>
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<td>Gerald McGrath</td>
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<td>Janutz-Klaue</td>
<td>University of Alberta</td>
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<td>Inaugural Meeting</td>
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## Prix de distinction de l’ACC / CCA Awards of Distinction

The awards of distinction, begun in 1994, recognize individuals or groups who have made exceptional contributions in the field of Cartography in one of three categories, past winners are listed below.

1. **Prix de distinction pour contributions exceptionnelles dans la recherche dans le domaine de la cartographie / Exceptional professional contributions to the practice of Cartography**
   - 1994 - Lou Skoda
   - 1995 - Claire Gosson
   - 1996 - Paul Pugliese (Time Magazine)
   - 1997 - not awarded
   - 1998 - Steven Fick
   - 1999 - College of Geographic Sciences and Sir Sandford Fleming College (2 awards)
   - 2000 - Lillian Wonders
   - 2001 - Lou Sebert
   - 2002 - GeoAccess Division, Natural Resources Canada
   - 2003 - not awarded
   - 2004 - Gerald McGrath
   - 2005 - Canadian Geographic Magazine

2. **Prix de distinction pour contributions exceptionnelles dans la pratique de la cartographie / Exceptional Scholarly contributions to the practice of Cartography**
   - 1994 - Historical Atlas Project
   - 1995 - Ron Eastman and the Idriat Project
   - 1996 - J. Ross Mackay and Henry Castner (2 awards)
   - 1997 - Lenard Guelke
   - 1998 - Arthur Robinson
   - 1999 - Michael Goodchild
   - 2000 - Ray Boyle
   - 2001 - Jean-Louis Ravenel
   - 2002 - Mark Mommonnier
   - 2003 - Richard Ruggles
   - 2004 - Alan MacEachren and David Woodward (2 awards)
   - 2005 - Judy Olson

3. **Prix de distinction pour contributions exceptionnelles à l’Association canadienne de cartographie / Exceptional contributions to the Canadian Cartographic Association:**
   - 1994 - Fraser Taylor
   - 1995 - Norman Drummond
   - 1996 - Barbara and Bernard Gutsell
   - 1997 - Carolyn Weiss and Michael Coulson (2 awards)
   - 1998 - Clifford Wood
   - 1999 - David Douglas
   - 2000 - Henry Castner
   - 2001 - Ed Dahl
   - 2002 - Roger Wheate
   - 2003 - Peter Keller
   - 2004 - Monika Rieger
   - 2005 - Gary McManus
Paul Heersink  
Ontario Ministry of Natural Resources

An Update on the CCABlog

Near the end of April 2005 I began the CCABlog, a collection of short write-ups on map-related sites of interest around the Internet. Since then I have posted more than 270 times, linking the blog to unique and interesting maps, useful cartographic tools and data collections. If you haven’t yet visited the Weblog you should do so and do so regularly; it is usually updated at least once or more each day.

Traffic to the CCABlog has steadily increased over the summer and into the fall. Currently, the number of visitors ranges from 100 to 300 each day. (A notable exception was November 22nd when over 18,000 visitors stopped by to take a look!) Some of the more popular postings in the past six months include:

A Review of Online Mapping Sites (October 22 - 29): I took the time to write up a review of 7 different online mapping sites, looking specifically at their cartographic qualities. Sites included Google Maps, Yahoo! Maps, MapQuest, MSN Maps and others.

Golden Gate Suicide Map (October 31): “San Francisco’s Golden Gate Bridge is not only a popular tourist attraction but also a popular place to commit suicide. About 19 suicides occur there on average every year. The San Francisco Chronicle has a story about the bridge’s more macabre attraction, including a map and a time chart.” This map was simple, clean and attractive - a perfect little piece of cartography and information design.

A font for cartographers (November 3): “After studying maps and cartography, Felix Arnold has designed a font, called Cisalpin, specifically for cartographers. Offered through LinoType, the purveyors of such popular fonts as Frutiger and Helvetica, Cisalpin is offered in OpenType format for both Macs and Windows platforms. The font description or catalogue copy comes complete with some map examples.”

Mapping the riots in France (November 12): Maps of current events always seem to be popular. However, not all events lend themselves easily to being portrayed on a map. Those that don’t always end up on good maps. This posting was a brief round up of the maps available at the time on the riots in France.

Soviet topographic maps (November 28): Not necessarily the best posting but certainly the most popular, this posting talked of the thoroughness of the Soviet mapping endeavour from 1940 to 1990. During that time the Russians sought to map every corner of the globe at various scales. In some places, the maps that resulted are still the best to be had. John Davies has written a 28 page paper on the topic that proved to be very informative.

The above postings (complete with links and images) and other postings can be viewed on the CCABlog at http://ccablog.blogspot.com.

I am always looking for fresh ideas and interesting sites. Some of my inspiration has come from Cartotalk (http://www.cartotalk.com), a discussion group for cartographers, and individuals who have emailed me suggestions. If you have anything you think would be of interest to other CCA members, please email me at paperglyphs@sympatico.ca

Lori King  
Ontario Ministry of Natural Resources  
Map Production Technology

Changes in Cartography During My Career

When I assumed the position of Map Production and Technology Interest Group for the CCA, I felt a bit intimidated by the responsibility and the potential of this interest group. This year the Canadian Cartographic Association (CCA) celebrates its 30th anniversary. In keeping with this theme, I thought I would share my reflections on the changes related to map production and technology over the past fifteen years. I would also like to use this article as a stepping-stone to ongoing discussions related to map production and technology. I am hoping to receive input into what you - the reader - want to hear. This is a broad subject so feedback and ideas are appreciated.

The annual conference is a great place for networking with colleagues that have like interest and is also a place where you will have opportunities to find a number of sessions that are relevant to you and to cartography today. This year in St. John’s we were given the opportunity to participate in hands-on workshops in ArcGIS and ArcHydro. During the planning sessions for the conference I’m sure the following questions must have been asked;
what is the cutting edge? Will it be accessible to all or to only a select number? Will enough conference attendees find it interesting? What do they want to hear? Will it fit into the conference timetable/venue? These questions can be answered with your assistance. Please feel free to contact me (lori.king@mnr.gov.on.ca) with ideas for future Cartouche articles or even better, submit your own article or prepare conference workshops/sessions. It is, after all, your conference. As the name “Interest Group” implies, there should be more than one person. Now, back to my reflections...

Picture it. June 1990. The previous three years were spent with approximately twenty other people learning the “craft” of Cartography and now we are set to graduate. More hours than I care to admit were passed either in the darkroom or the labs. Painstaking care was taken in choosing colours, text, and line and point styles. Remember the stripping film? Hours were spent huddled over the light table scribing, peeling and burnishing text. When mistakes were made, perhaps you started over again, or you made a quick trip to the bookstore to purchase more scribe coats, peel coats or film. You really tried not to make any mistakes. Why? Deadlines, due dates and lack of funds! We were taught which projection to use, what data to include, cartographic generalization and text placement. Map layout was taught over and over again! Graphic design was a huge component of our program. Making a good map was a task that required a lot of thought and planning. Flow charts still make me shiver! That was the beginning of my journey as a Cartographic Technologist.

Picture it, (Humour me!). November 2005. I’m sitting at my desk making maps for a client. There is no light table, scribe coats or stripping film. Instead my desk is cluttered with, among other things, 2 large monitors. Now I make my maps on the computer. Make a mistake? No problem – oops or undo usually does the trick! Don’t forget the modern saviour – backups. Certainly, things have changed over the past fifteen, never mind thirty years!

The way in which maps are produced today has changed quite significantly – manual cartography versus computer cartography. There are several reasons that make this migration a positive one. Edits are easier (both physically and financially), turnaround time is quicker, data availability can be better, design possibilities are broader, overhead costs are likely lower depending on the equipment in the shop, and anyone with slightly better than beginner computer skills can make a map. The steps involved in producing a map shouldn’t have changed. You still need to identify what you are communicating to the map-reader, and once that is done you have to select the data to use. This data may require processing before it can be included on the map. How will that be done? The same principles come into play when designing the map layout in a digital environment as opposed to the former manual method.

What are the issues here? There are ongoing conversations throughout the cartographic community regarding the migration from manual to digital map production. The general consensus seems to be that while map production is easier and certainly more accessible than fifteen years ago, in some cases today there is often a lack of cartographic theory applied to digital map production. Whichever way a map is produced there must be sound decisions made about its content. Novice map-makers rely on the software program they are using to make design decisions for them. Herein lies the problem. Are software default-driven design decisions correct? Do they result in a cartographically sound product? Organizations utilizing digital map production are now recognizing this deficiency and are implementing guidelines for the creation of map products through their organization. The inclusion of map elements are suggested and defended by existing cartographic standards. Online tools such as Color Brewer by Cynthia Brewer have been developed to help people select colour schemes for maps and other graphics.

There are several software programs available for map production – GIS based and non-GIS based. Which one should be used? Is one better than the other? In trying to answer these questions for myself, I joined a public forum for cartography and design called CartoTalk (www.cartotalk.com). Online forums are a great place for the sharing of information and ideas. For instance, through CartoTalk, I learned that a large number of people use a non-GIS program (like Adobe Illustrator) to “finish” their maps – make them “pretty” if you like. In future issues of Cartouche, I hope to address the questions raised in this article, discuss how maps are created now and what software is used when and why. I would also like to address how information and ideas can be shared within the cartography community. Stayed tuned for further discussion!
What Good is a Map?
Cartography in the Hands of the People

Recently I attended a GIS Day panel discussion at the university where I teach. One panelist, a prominent faculty member in epidemiology, presented a choropleth map of pancreatic cancer incidence by US state. The source of the data for this map was the Center for Disease Control (CDC) in Atlanta. Surprisingly the map showed that the highest rates of cancer occurred along the eastern seaboard was much lower in the central states and increased slightly along the west coast. Looking around, the audience seemed to long for an explanation. So, I asked. The presenter’s response was, “I’m not sure, I don’t know much about the data that I used to create this map”. Hmm. While most of the audience appeared unsatisfied with this reply, any cartographers present had an understandable right to be alarmed. What good is a map?

Like it or not, cartography is now in the hands of the people. Individuals well beyond the discipline of cartography have found the benefits of geographic information systems (GIS) to create maps. Today there are more maps being produced than ever. While the tools are in the hands of the people, this does not mean that the art or technique of making maps is understood and applied. I find this troubling, as I’m sure you do also. My concern was only exacerbated by my experience at GIS Day this year. A post hoc conclusion, which I made about the cancer map, was that the apparent trend toward elevated cancer incidence on the Atlantic coast was largely an artifact of the data classification method and the visual effect of difference in state area.

While I present this troubling example of an epidemiological choropleth map, I am encouraged by the use of GIS in disciplines that have traditionally not had strong associations with geography. I see this as an adulation for our discipline – cartography is not dead or dying. However, we in the business of map making are, at present, faced with a new playing field. For a map to be a ‘good map’, it requires more than data and an interesting theme. I will operate under the assumption that most individuals engaged in the production of maps wish to present their data in an informative manner, without the intention to mislead. So here is the simple argument: the current ease of producing maps is negatively correlated with their reliability at communicating information with minimal bias; ergo, a greater need for individuals trained in cartography. I personally believe that we need to take a serious look at our geography curriculum and make sure that any student receiving a GIS minor or major must take cartography as a prerequisite. Let’s not put the ‘GIS carriage’ before the ‘cartography horse’. For some of our departments, this will mean lobbying to get a cartography course back on the books!

Cartographers no longer rule the world; today the world is not ruled, it is digitized. Regardless, the fundamentals of map making remain a constant, thus meaning that there is an ever greater requirement for cartographers. However in the short term we must engage in shameless carto-promotion, a characteristic that may require cultivation for some of us. I challenge us at this 30th Anniversary of the Canadian Cartographic Association (CCA) to lift cartography out of its mainstream obscurity and to show others its necessities in this new world of map-making.

A Reflection on Teaching Cartography

This is a personal reflection based on 25 years of immersion in cartography. Starting in 1980 when I took my first class in cartography at Queen’s University from one of the founders of the CCA, Dr. Henry Castine; since then, I have taught cartography in government, industry and academia, and it is this experience that I will share with you.

My fundamental belief is that in the last 25 years, although much has changed with production
technology, little has changed with respect to the art and science of cartography. This is not to say I teach from the yellowed notes of my undergraduate years in the 1980s. Nevertheless, the essentials of cartography that I learned from Henry Castner years ago (spatial reference systems, map projections, scale, generalization, descriptive statistics, data classification, and thematic map design) remain very much the same, both in lectures and lab exercises. The great change has been in the technology; the utilization of pens, scribe coats, peel coats and dark rooms has been replaced with computer labs. The technology has also changed my teaching—not content but delivery; from black and white overheads of maps and text, to colour slides, to colour PowerPoint presentations. I now travel to class with only a memory stick in my hand containing a digital copy of my lecture.

Fundamental principles of cartography are independent of the technology. Whether we are lettering maps with chiseled Elegant Flair pens, phototypesetters, or computer graphics packages, the theory of lettering placement has remained the same. Whether dividing data into classes by hand, with a calculator, Excel or ArcGIS, the principles of data classification remain the same. Whether selecting colours from pencil crayons, a Munsell colour solid or using Colourbrewer and web safe colours, the theoretical basis for the application of qualitative and quantitative colour palettes to thematic maps remains the same.

These reflections are supported by a review of my copies of Robinson’s Elements of Cartography (published in 1969, 1984 and 1995) as well as other more recent texts by Dent and Slocum. Chapters on the fundamentals of cartography have remained much the same over 30 (or more) years, whereas the chapters on technical reproduction have changed significantly from decade to decade.

The interest in teaching cartography in academia took a dip in the late 1980’s, as the proliferation of GIS coincided with the retirement of cartography professors and their replacement with GIS’ers, some of whom had little or no exposure to cartographic theory. This state of affairs may have been different, and related research; these were dark years for cartography, to be sure. But interest has come back to cartography; we are now in a time of expanding cartographic teaching and research. Our new era may be labeled differently (data visualization), but it is still based upon the cartographic fundamentals as first published in Robinson’s textbook so many years ago. For example, I teach classes in GIS; cartography serves as the building blocks of my lectures on spatial data, coordinate systems and datum; fundamentals of cartographic design are taught in the data visualization components of the GIS lectures. As GIS has matured, the need for dissemination and visualization of the data to end-users (usually on the web) has become prominent. Jobs in GIS often now require cartographic experience.

GIS also reinforces that maps empower society and in response to this, there has been a huge rise in community mapping projects, some of which go right back to the basics of pencil crayons.

Our challenge is now to incorporate technological revolutions, such as Google Earth (see “Killer Maps” in Technology Review, October 2005), into our teaching, so that we and our students stay current with the applications of the fundamentals of cartography in our exciting new age of the proliferation of spatial information.

David Raymond
Centre of Geographic Sciences
History of Cartography

The Golden Age of Paper

The recent announcement by our federal mapping agency in forwarding its decision to phase-out the printing and paper storage of our national topographic mapping series has created quite a stir in the back rooms of many map-aware organizations. Can I be so bold as to say that I support the move away from our traditional paper-based way of life?... well, at least eventually. Looking at the historical picture, we have always embraced advancing technologies and conveniently applied them to our little corner of the world. So, it should not be difficult for us to consider any new technology that supports our cartographic cause. Evaluating these advances will be important given that our reliance on paper is bound to diminish over the next few years, and the paper-related way we use maps.

Since the 1470’s, map production and distribution have been literally joined at the hip with the printing and publishing business, and we have been riding that wave for all it’s worth. Wood-cuts to copperplate engraving, copperplate to steel engraving, steel to lithography, lithography to digital printing. We have used every advantage of these systems to mass
produce the maps we assemble. The explosion in printed materials over the past hundred years was impressive to say the least; however it was seemingly propped-up by the economics of cheap paper.

The problem is that maps appear in all sizes and since we all use them in slightly different ways, traditional paper still provides the best flexibility. Our current options are limited if there is to be a shift away from this medium, but one emerging technology that holds promise is TFT-LCD; although obviously not a household acronym in 2005. Thin-film transistor liquid crystal display, or electronic paper, is nothing less than amazing. Built on a 300-micron substrate and now capable of displaying colour or black and white images and full motion video, electronic paper promises the flexibility of normal paper with a digital twist. Imagine a world atlas in a format you can roll-up, put in your pocket or briefcase; high-definition wall paper for your home; full motion video on a billboard sized display that weighs next to nothing; or the Dictionary of National Biography in single sheet format.

If you've been watching the developments in this area, you may recall some fanfare back in 2001 when E Ink Corporation of Cambridge Mass. announced their research in digital ink. The company has now teamed with other strategic partners, Toppan and LG.Philips LCD, who have produced a letter-sized prototype that has acceptable resolution and contrast. Other companies such as HP, Siemens, Fujitsu, Sony and Xerox are also hot to offer solutions for flexible displays since the market possibilities for portable products are huge. After years of research and development in this area, we are now beginning to see some results, but still a long way indeed from replacing good old pulp-based paper.

Hi-res maps from the BNF
A new batch of high-resolution maps from the Bibliothèque Nationale de France has recently been made available online by Jacques Zan. Over 200 images are included with the set and the scan quality is quite acceptable. Images are displayed in JPEG format up to 5000 pixels wide and supply sufficient detail for a number of uses. The example below shows detail from the Gentleman's Magazine map A Plan of the Harbour of Chebucto and Town of Halifax with enough resolution to identify the initials of Moses Harris.

As always, any comments or observations are welcomed and please feel free to contact me: maps@ns.sympatico.ca

Until next issue...

[Photo LG.Philips LCD]

[cartanciennes.free.fr]
Two Aphorisms in GIS and Cartography

Lou Sebert
1916 -2002

[This was Lou’s response on receiving the award for exception contributions to the practice of Cartography.]

There is one advantage in growing old and that is the ability to look back over the progress of one’s profession for a longer number of years than younger people. In my case I have seen many innovations and changes in cartography. Some have been trivial, such as the abandonment of pen and ink drafting for scribing, but some have been fundamental, such as the invention of the Geographic Information Systems (GIS).

The mention of GIS reminds me of two aphorisms that I would like to leave with you. Some of you may think them trite, others may consider them profound. I will leave that up to you.

The first aphorism is: GIS is to geography what the telescope was to astronomy. A little too sweeping? Perhaps, but consider that today no graduate course in geography is giving without some application of GIS. And consider the vital role of digital cartography in the success of GIS. It is all well and good to invent a system for the mass gathering of data but unless you have a second system for making the data intelligible, the first system is useless.

As a simple example of this consider a digital terrain model. Here the output is a sheet of paper covered with figures (elevations) that to a quick glance looks like a screen door. But pass the data through the appropriate software that sorts the elevations into contours and you have a terrain model that displays the hills and valleys, and show where the rivers flow and where roads can be built.

My second aphorism was first voiced by Professor Ormerling of the International Training Centre in Holland. He was the principal of this school which was founded to train surveyors, cartographers and geographers of many countries but mostly of the third world. He came to Canada periodically in the 1960s and 70s, mainly to visit ex-students who had immigrated here but also to encourage the Canadian government to hire more of them. At a small luncheon he gave for his ex-students at which I was invited, he gave a sort speech during which he said, “I hope you realize how fortunate you are to be working in Canada. Canada is the world’s largest cartographic laboratory”.

That is my second aphorism; Canada is the world’s largest cartographic laboratory. This was in 1970. Uki Helava, at the National Research Council had just invited the world’s first analytical Photogrammetric Plotter. Roger Tomlinson at the Department of Agriculture had just put into operation the first Geographic Information System. Dr. Ray Boyle at the Canadian Hydrographic Service had developed a functioning digital hydrographic chart system. New and very useful cartographic software was appearing almost monthly. David Douglas, at Ottawa University, produced one of the contouring systems mentioned previously.

All in all, this was a very exciting time, and the excitement continues to this day. Thank you for this opportunity to speak to you.
CALL FOR NOMINATIONS
MISES EN CANDIDATURE

Elections 2006 / Élections 2006

Nominations are sought for the following positions for election in 2006 / Les postes suivants seront à combler lors des élections de 2006:

- Vice-President / Vice-Président
- Secretary / Secrétaire
- Interest Group Chair, Analytical Cartography and GIS / Président du groupe d’intérêt Cartographie analytique et SIG
- Interest Group Chair, Map Use and Design / Président du groupe d’intérêt Conception et utilisation des cartes
- Interest Group Chair, History of Cartography / Président du groupe d’intérêt Histoire de la cartographie

Please send nominations and suggestions to Christine Earl, Chair of the Nominations Committee by January 31, 2006 / Nous vous invitons à soumettre des candidatures pour ces postes de l’exécutif avant le 31 janvier 2006, à Christine Earl, Présidente du comité de candidatures.

cearl@ccs.carleton.ca

A Brief History of Time

Joe Piwowar

IN THE BEGINNING (of the digital era in geography), God (inspired some lesser subordinates here on earth to cause to be) created Automated Cartography. God (and us earthlings, too) saw that it was good.

ON THE SECOND DAY God saw a need for us mortals to get spatial data into digital form so He created digitizing tables. God (and optometrists, chiropractors and others whose coffers have swelled as a result of us toiling long hours over these wondrous devices) saw that it was good.

ON THE THIRD DAY God said, “There’s gotta be a better way to get spatial data into a computer,” so She created Remote Sensing. Although God’s plan had limited resolutions at first, the mists slowly parted and we were able to see earth in all the colours of the rainbow. God saw that it was good to view the world from a new perspective, even if things still looked a little fuzzy.

ON THE FOURTH DAY God said, “Let the spatial databases be divided into two.” And so it was. God called the vector parts “arcs” and the raster parts “grids.” Someone (I’m sure it wasn’t God) said, “Let the rasters be faster but the vectors be corrector”. God saw that it was good, if not a little confusing.

ON THE FIFTH DAY God saw that automated Mapping and Remote Sensing were lonely so he said, “Let the Automated Mapping and the Remote Sensing come together into a single mass.” And out of their bellies She took a choropleth and a pixel and fashioned a new sibling, which She didn’t know what to call, so She left it up to us. We have been agonizing over names like Geographic Information Systems, Cadastral Mapping Systems, and so on, ever since. Anyway, God saw that it was good.

ON THE SIXTH DAY God said “Let the schools produce every kind of wild beast, every kind of cattle, every kind of reptile, and every kind of geo-spatial mapping professional.” God blessed them, saying, “Be fruitful, multiply and fill every government agency and private corporation with spatial technologies and conquer them.” God saw that it was good since it kept a lot of geography instructors employed.

ON THE SEVENTH DAY God reflected at the wonder of all of Her creation and said, “Oh my God! What have I done?!” She passed out into a coma.
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 (CAN$):

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<td>Regular Student</td>
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To cover mailing costs US residents please add $10 CDN and Overseas residents please add $10 CDN 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.

The CCA is an association for the cartographic profession in Canada, promoting the exchange of ideas and information about cartography, cartographic data, and their applications. It aims to foster the development and dissemination of cartographic knowledge, and to promote the interests and objectives of its members. The CCA is a member of the International Cartographic Association (ICA) and the Canadian Federation of Geographic Societies (CFG). The CCA's mission is to advance the science of cartography and to foster the exchange of ideas and information among cartographers, educators, and other interested persons. The CCA also supports the development of cartographic standards and guidelines, and promotes the use of cartography in education, research, and practice.
Happy New Year

Bonne Année

2006