

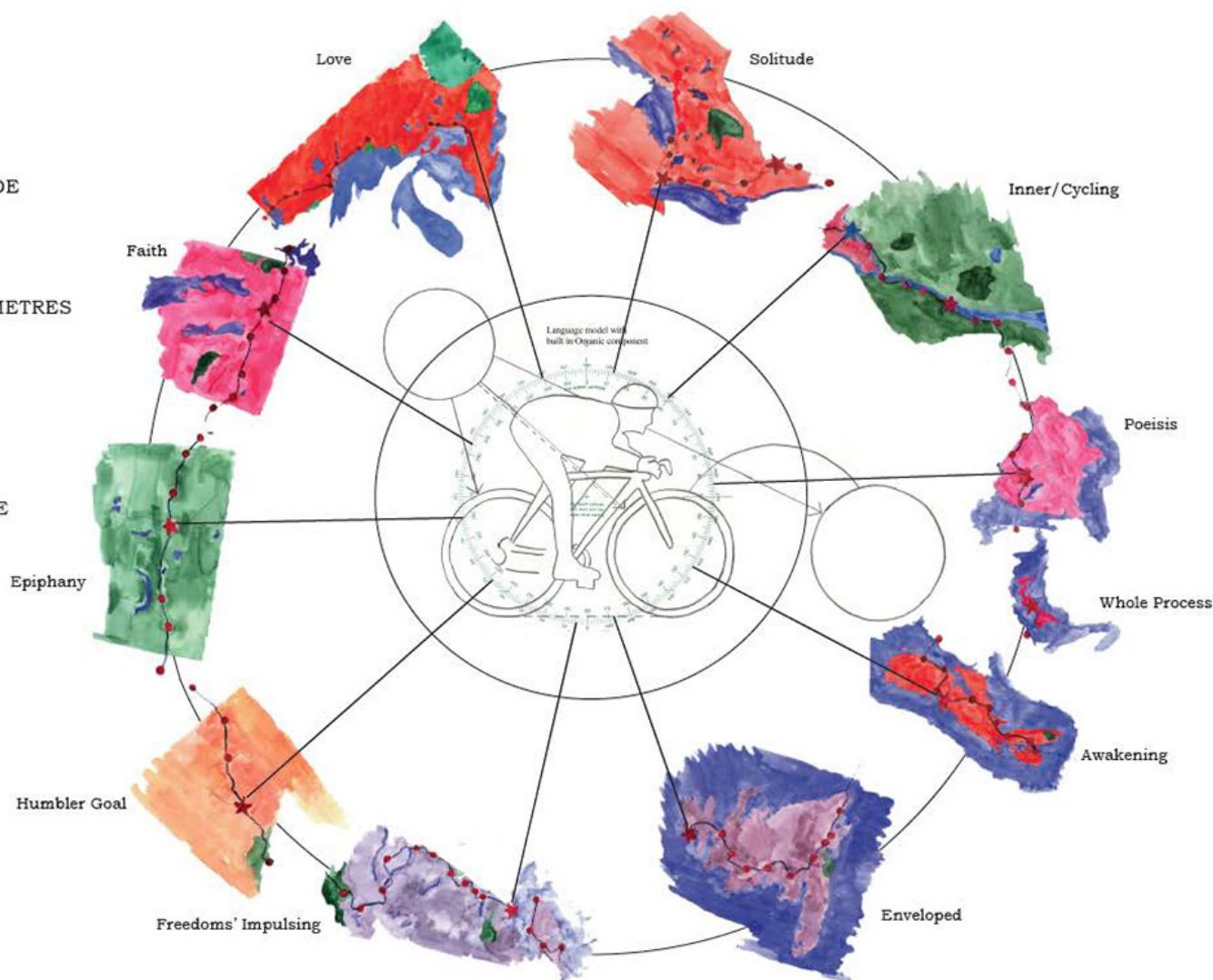
Cartouche

Number 86, Winter/Spring 2013

Numéro 86, hiver/printemps 2013

FROM SOLITUDE
TO LOVE
A BIKE RIDE
OF 9132 KILOMETRES
IN 104 DAYS

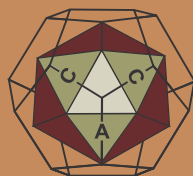
569 HOURS &
15 MINUTES
CYCLING HOME



Following a personal tragedy Michael J. Coulis cycled across Canada for reflection and soul searching.
Follow Michael's journey starting on page 6.

Newsletter of the
Canadian Cartographic Association

www.cca-acc.org



Bulletin de
l'Association canadienne de cartographie

www.cca-acc.org

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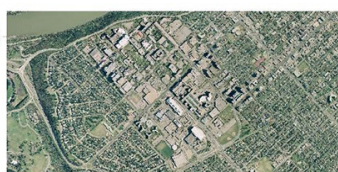
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ISSN 1183-2045

"He lunged for the maps. I grabbed the chair and hit him with it. He went down. I hit him again to make sure he stayed that way, stepped over him, and picked up the maps.

"I win."

Ilona Andrews, *Magic Burns*



North by West: Preserving the Present as We Journey to the Future

Join the Association of Canadian Map Libraries and Archives (ACMLA) and the Canadian Cartographic Association (CCA) at the University of Alberta, Edmonton, June 11-14, for their 5th joint meeting since 1998.

<http://blogs.library.ualberta.ca/carto2013/>

The conference has a full program containing 4 workshops, 2 keynote, 32 oral and 6 poster presentations, along with map displays. Social activities include the banquet and icebreaker, as well as the traditional orienteering event.

Vers le Nord Ouest: Préserver le présent en voyageant vers le futur

Vous êtes cordialement invité à la 5^{ème} conférence conjointe de l'Association des cartothèques et archives cartographiques du Canada (ACACC) et l'Association canadienne de cartographie (ACC) à l'Université de l'Alberta, Edmonton, du 11 au 14 juin 2013.

<http://blogs.library.ualberta.ca/carto2013/>

La conférence a un programme complet contenant 4 ateliers, 2 discours d'ouvertures, 32 orales et 6 présentations par affiches, ainsi qu'une exposition cartographiques. Les activités sociales consiste d'un banquet et brise-glace, ainsi que la course d'orientation traditionnelle.

Program / Programme:

http://blogs.library.ualberta.ca/carto2013/wp-content/uploads/2013/03/CARTO2013_program.pdf

Registration / Inscription:

http://blogs.library.ualberta.ca/carto2013/?page_id=17#cid=688&wid=501

The editors of Cartouche would like to apologize to Andrea C. Berry for misspelling her name in the last issue of Cartouche. We are sorry for any inconvenience.

PRESIDENT'S MESSAGE

Anna Jasiak

An Invitation to Carto 2013, June 11-June 14, 2013

On behalf of the Canadian Cartographic Association, I would like to invite all our CCA members, non-members, partners with academia, industry and all cartography enthusiasts to consider attending our next annual conference. This year the conference is being hosted by the University of Alberta in Edmonton, in partnership with our colleagues from the Association of Canadian Map Libraries and Archives (ACMLA) for a fifth joint meeting since 1998.

The theme of the conference this year is "North by West – Preserving the Present as we Journey to the Future". The conference will take place from June 11th until June 14th, 2013.

<http://blogs.library.ualberta.ca/carto2013/>

I am very pleased with the efforts made by the CCA program committee and by the CCA members that have come forward to participate in the program this year! We are being represented during the workshops on June 11th with the session on "Creating and Sharing Maps with ArcGIS Online". This year the majority of the conference program sessions are plenary, allowing all delegates to participate in each of the presentations, with only a select part of the program concurrent for the CCA and ACMLA. Many of the sessions throughout the conference will showcase our CCA members and their cartographic expertise. In addition to the workshops and sessions, the conference organizers are proud to announce two keynote speakers:

Barbara Belyea, speaking on "A Map and Nine Makers", and Aileen Buckley, speaking on "The Stories Maps Tell".

In addition to the Carto 2013 news, I am pleased to accept the role of President for a second year, by which Christopher Storie will assume the role of Vice President for the same period. With this extended tenure it is hoped that the transformative work our executive has been building on this year, will be assured to carry the same momentum forward as we make improvements to the CCA website, our newsletter, and venture onward towards reaching a broader audience through social media and making use of the tools within a Web 2.0 environment. I am proud to report that our current executive is full of enthusiasm and many progressive ideas that will support the mission of the association – connecting with cartographic experts and enthusiasts alike, and providing a venue to better share and exchange knowledge, expertise and information about everything cartographic and mapping!

I strongly encourage you to join us this year in Edmonton and share with us in this very exciting program.

http://blogs.library.ualberta.ca/carto2013/?page_id=36

Non-members who register for the conference are able to select the option to pay for both the conference fee and a reduced rate membership to either of the two associations!



Charting a Course

Last September 26-29, 2012, the Newfoundland Historical Society hosted the Captain James Cook Symposium. As part of the symposium, featuring Captain Cook in Newfoundland, John Robson (University of Waikato, New Zealand librarian and noted expert on James Cook) provided a web-based presentation "James Cook as a Map Maker." His lecture is available at:

<http://www.nlhistory.ca/video3/video7.html>

VICE PRESIDENT'S MESSAGE

Chris Storie



Let me start off by welcoming everyone to our “pre-conference” issue. The upcoming CARTO2013 is proving to be an exciting and cartographically filled week in Edmonton. I encourage anyone who is able to attend to do so. I hope to see and meet as many of you as possible in Edmonton.

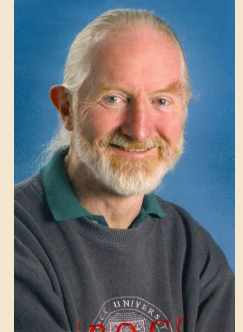
The CCA is going through a period of renewal. Our membership numbers are stable but not growing. We have a very dedicated, active, and committed membership, and an executive that is looking towards the future. We have been looking at ways of increasing our exposure to a broader mapping community with the goal of increasing our membership base. As a result there are some changes afoot – we will be launching over the summer marketing posters aimed at attracting students – our next generation – to join the CCA. We are in the process of developing a new website, we are active on Twitter and Facebook, and are looking at new ways to get our membership engaged and active on a regular basis. I encourage our members to get in touch with the IG chairs that they feel best represents them to discuss ways of becoming involved. Contact me directly if you want.

Lastly, there are some executive “non-changes” happening. To ensure a continuity of what we have been working on for the past year, it was agreed upon that Anna Jasiak would remain President for a second term. This also means that I will remain Vice-President for another year before assuming the role of President. Gerald Stark will continue as the Past-President for one more year and will be chairing the committee tasked with filling any vacant spots in the executive (we will be looking for a new VP for the next AGM in 2014). If you are thinking of becoming involved at the executive level please contact Gerald (or myself) and we can hopefully answer any questions you may have.

I look forward to seeing you all in Edmonton in June!
Chris.

Alun Owen Hughes

May 4, 1942 - May 9, 2013



With great sadness the family of Alun Hughes announces his death following a lengthy illness.

He leaves his family: wife Joyce Little and children Dafydd (Andrée) of Toronto, Elinor (Stephen) of Port Moody B.C., Nia, a student at the University of Guelph and Ffion, attending A.N. Myer Secondary School; grandchildren Clare and Brigid Matheson and Max Owen Hughes; and sister Eira Wyn Hughes of Broadbottom, Cheshire, U.K.

Alun was born in Bridgend, South Wales and raised in a Welsh-speaking home. He attended Cowbridge Grammar School and graduated from St. John's College, Cambridge in 1965; he then obtained a teaching certificate and an MA from Cambridge and a diploma in cartography from the University College of Swansea. From 1967 to 1969 he worked in London as a cartographic editor.

Alun came to Canada to join the faculty of the Department of Geography at Brock University in 1969, teaching cartography, geomatics, surveying, remote sensing, and GIS. He retired in 2012. In addition to being a dedicated and popular teacher and mentor, Alun's contributions to Brock included co-founding and coaching the Brock Rugby Club.

He was involved in teaching and promoting the Welsh language in North America, including his participation in Cymdeithas Madog and the Ontario Gymanfa Ganu Association. In 1989 in recognition of his contribution to the life of the Welsh language he was inducted into the highest rank of the Gorsedd of Bards at the National Eisteddfod of Wales. For the past twenty years, Alun's primary research interest was local history, particularly that of the City of Thorold.

He was widely known as a popular and enthusiastic speaker, generously sharing his knowledge through lectures, field trips and published research. He also served on many local committees, boards, and historical societies. Over the course of a long and productive career Alun received numerous honours and awards, including the British Cartographic Society's Design Award (1988), Thorold Citizen of the Year (2003) and the Queen's Diamond Jubilee Medal (2013). He was recently named Honorary Historian of the City of Thorold.

Alun was a long time member of the CCA serving as president of the Association from 1993-94.

A Funeral Service to celebrate Alun's life was held at Silver Spire United Church (366 St. Paul St., St. Catharines) on Wednesday, May 15th at 11:00am.

In lieu of flowers, Alun's family would appreciate contributions to a fund established in his honour with Brock's Special Collections and Archives for the acquisition of materials relating to the history of the Niagara Peninsula. Donations may be directed to The Brock University Library.

Obituary provided by canadianobituaries.com

PAST PRESIDENT'S MESSAGE

Gerald Stark

Looking forward to seeing you in Alberta's Capital City

Greetings Fellow CCA Members

As we come out of what has been for a lot of us, a rather trying winter season from a weather standpoint we can look forward to our annual general meeting and conference this coming June.

The venue this year at the University of Alberta in Edmonton promises to offer an extensive menu of cartographic related presentations as we partner once again with our good friends in the Association of Canadian Map Libraries and Archives (ACMLA).

In addition to papers and posters at this year's conference I would hope that attendees take the opportunity to visit one of North America's largest academic map libraries. The William C. Wonders Map Collection (<http://guides.library.ualberta.ca/maps>) is a definite 'must-see' place for all cartophiles. With over a half million maps from around the world in its archive, it is perhaps simpler to ask the collections' staff what they do not have rather than have them undertake the arduous task of listing off their current inventory. Also included in the map collections are several hundred atlases and innumerable air photographs. Such a large collection of cartographic materials requires storage space to be allocated in several locations. The core of the map collection, including rare maps is located on the 4th floor of the Cameron Library on the main campus of the University of Alberta.

Aside from the conference venue, I would also like to offer a couple of suggestions about activities that I, as an Edmontonian, think would be of interest if you are looking to explore a little bit of Alberta's capital city for the first time.

North Saskatchewan River Valley: An oasis of green cutting through Edmonton, the valley offers a welcome respite from the hurly-burly of the city. There are about 27 public parks

within the valley, all linked together by numerous hiking trails. The main U of A campus is situated next to the valley trail system.

Whyte (82nd) Avenue.: Located a short bus ride or walk from the U of A campus, the stretch of Whyte Ave. from 100th Street to 109th Street is a unique urban landscape with many one-of-a-kind shops, various pubs, live theatres and art galleries. This is the Old Strathcona neighbourhood and some say it is where the 'in-crowd' hangs out in Edmonton.

I look forward to seeing you in June, and as the picture of myself indicates, Edmonton does indeed get warm weather.



CCA Past-President Gerald Stark with downtown Edmonton in the background. (Photo credit: G. Stark)

SPECIAL FEATURE

Michael J. Coulis

Map making as a work of personal cartography

"The unity of all sciences is found in geography. The significance of geography is that it presents the earth as the enduring home of the occupations of humankind."

--John Dewey, *Essays on School and Society*

I have had an unconventional life long learning journey—I think it began somewhere back in kindergarten—and, only as of late, have I been able to map segments of this journey into something that continues to change, take on new meaning, new shape, and new rhythms.

My interest in life long learning developed through grieving Kerry McNamara's death; Kerry was a childhood friend, and the woman I married in the summer of 1995. Killed 22-months later in a car collision, I buried Kerry spring of 1997. She was 32 years of age.

The following spring I set out on a solo cross Canada bicycle journey; a journey that ultimately turned into a moving mediation on grief. My ride started from Kerry's gravestone in Perkinsfield, Ontario. I rode east to Newfoundland, which took me close to two months. From Newfoundland I took a plane to British Columbia and began my ride east. From British Columbia to Ontario I cycled approximately 6000 kilometers. In total, the entire journey took 6 months to complete, covering a distance of roughly 9300 kilometers.

On the bike for those many kilometers I found myself moving in a cadence of harmonies with changing landscapes by the gift of my body's own human powered locomotion. Steeped in the primordial body the cyclist cum cartographer finds buried within himself points of ecological contact amongst a circumambience so very foreign on a conscious level, yet, so very familiar at another level. Through the movement the cyclist's body becomes oriented toward a kind of kinetic knowledge combining motility, voice, technology (the bicycle/the road), the landscape, sun, wind, rain, blistering heat and foot numbing cold.

John Dewey, in his text, *Art as Experience*, describes such forms of knowing as obtaining through organicism. "The epidermis," writes Dewey, "is only in the most superficial way an indication of where an organism ends and its environment begins. There are things inside the body that are foreign to it, and there are things outside of it that belong to it, de jure, if not de facto" (see Dewey, 1958).

Hence, the landscape exists as more than a mere surface over which the bicycle traversed. Rather it became a substrate through which the cyclist's body became absorbed in its processes of mapping a new language, "the nervous circuitry and musculature that pumped the pedals over vast distances is also the body that created maps for another landscape, a landscape of places where emotions sizzled and shapes and colours doubled into visions" (Lingis, quoted in Coulis, 2010, p. 8).

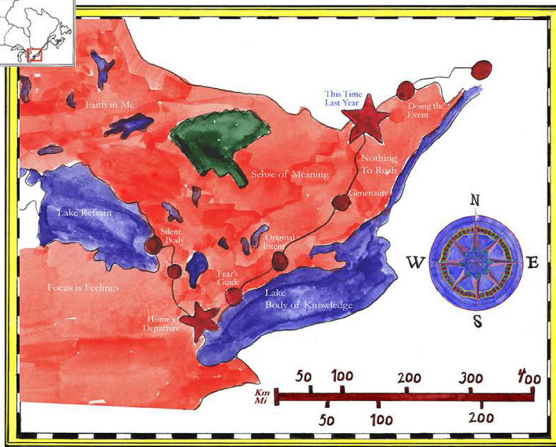
The way points inscribed on the I I-watercolour maps are names which reveal where the cyclist's emotions spoke in time and space; emulating a version of "keening", which is an Irish term describing the expression of grief through a form of high-pitched intense voicing, most often undertaken by women in Ireland. The journey was one of giving voice to grief and mourning, and doing mourning as a process of working through the pain of loss. A process David Jones, wittily portrayed as "a psycho-geographic or cycle-logical passage from solitude to love."

References:

Coulis, Michael J. (2010). Expanding the boundaries of cartography: Journeys beyond the neat line Exhibition curated by David L. Jones, Edmonton, AB: University of Alberta Libraries
Dewey, John (1958). *Art as experience* New York: Capricorn Books.

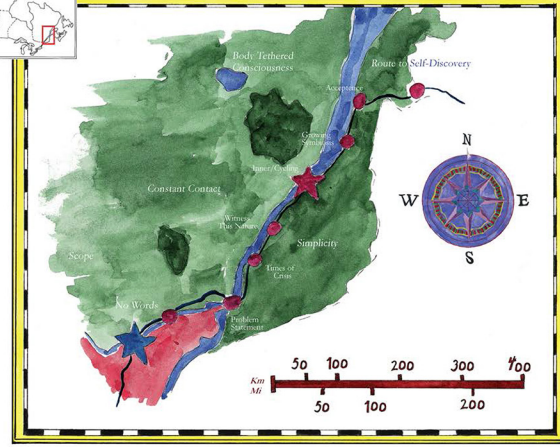
For more information about Michael:

<http://exhibits.library.ualberta.ca/maps/MichaelsFolder/MichaelsPage.html>



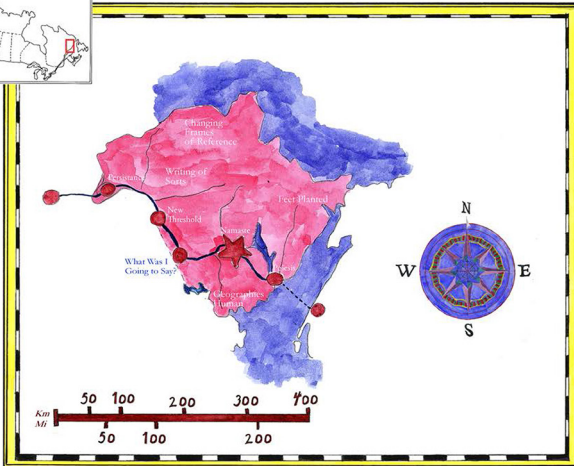
Map 1
Solitude

Silent Body*
150 kms/10 hours
Home's Departure*
55 kms/3 hours
Fear's Guide*
115 kms/8 hours 30 minutes
Original Intent*
153 kms/10 hours
Generosity*
115 kms/6 hours 30 minutes
This Time Last Year*
95 kms/6 hours 30 minutes
Doing the Event*
Faith in Me*
Sense of Meaning*
Nothing to Rush*
Lake Body of Knowledge
Lake Refrain
Focus is Feelings*



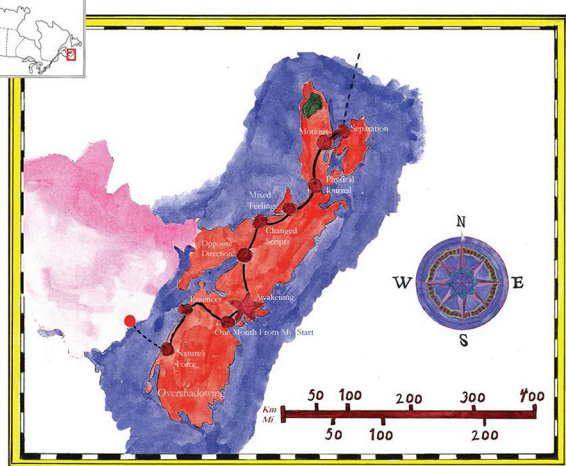
Map 2
Inner/Cycling

Problem Statement*
121 kms/7 hours 30 minutes
Time of Crisis*
116 kms/5 hours 30 minutes
Witness This Nature*
96 kms/5 hours 30 minutes
Inner/Cycling*
95 kms/7 hours
Crowding Symbols*
78 kms/7 hours 45 minutes
Acceptance*
Body Tethered Conscience*
Route to Self-Discovery*
Simplicity*
Constant Contact*
No Words*
Scope*
Reflect*



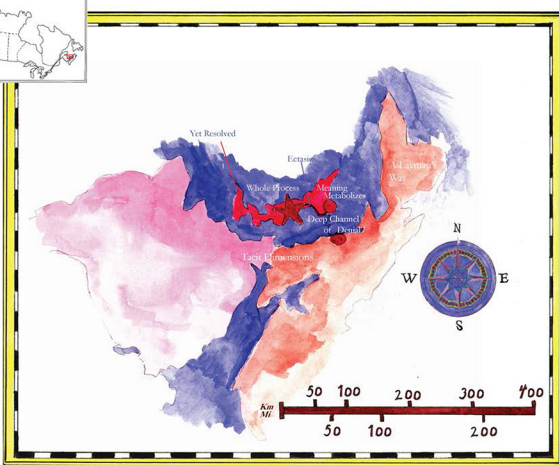
Map 3
Poiesis

Persistence*
113 kms/7 hours
New Threshold*
95 kms/6 hours 35 minutes
What Was I Going to Say*
53 kms/4 hours 30 minutes
Namaste*
117 kms/5 hours 30 minutes
Poiesis*
Writing of Sorts*
Changing Frames of Reference*
Feet Planted*
Geographies Human*



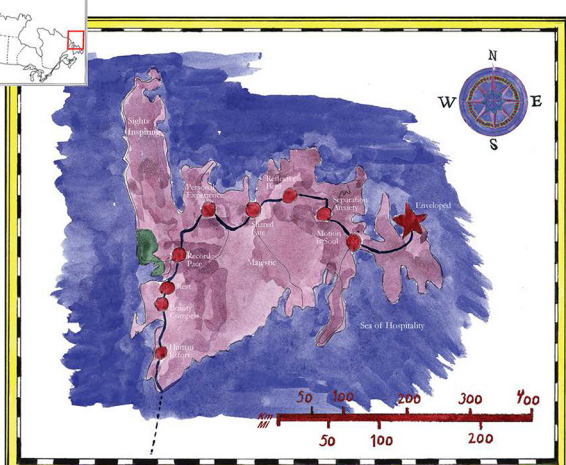
Map 4
Awakening

Nature's Force*
120 kms/6 hours 30 minutes
Essence*
120 kms/8 hours 45 minutes
One Month from My Start*
70 kms/6 hours
Awakening*
100 kms/7 hours
Opposite Direction*
75 kms/6 hours 45 minutes
Changed Scripts*
90 kms/7 hours 30 minutes
Mixed Feelings*
55 kms/5 hours 30 minutes
Physical Journal*
100 kms/5 hours
Motions*
65 kms/4 hours
Separation*
Overshadowing*



Map 5
Whole Process

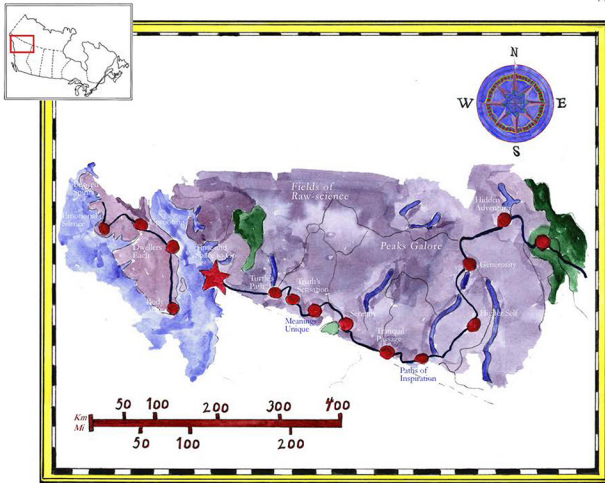
Meaning Metabolizes*
85 kms/6 hours
Whole Process*
Yet Resolved*
Ectasies*
Reason/Passion*
A Layman's Way*
Deep Channel of Denial
Tactic Dimensions*



Map 6
Enveloped

Ferry Dock*
100 kms/7 hours
Human Effort*
112 kms/6 hours
Beauty Compels*
20 kms/1 hour
Rest*
50 kms/2 hours
Record Pace*
140 kms/6 hours 30 minutes
Personal Experience*
105 kms/6 hours 45 minutes
Shared Fates*
80 kms/4 hours
Reflexive Bent*
90 kms/4 hours
Separation Anxiety*
123 kms/7 hours 15 minutes
Motion is Soul*
137 kms/9 hours 40 minutes
Enveloped*
Majestic*
Sea of Hospitality
Sights Inspiring*

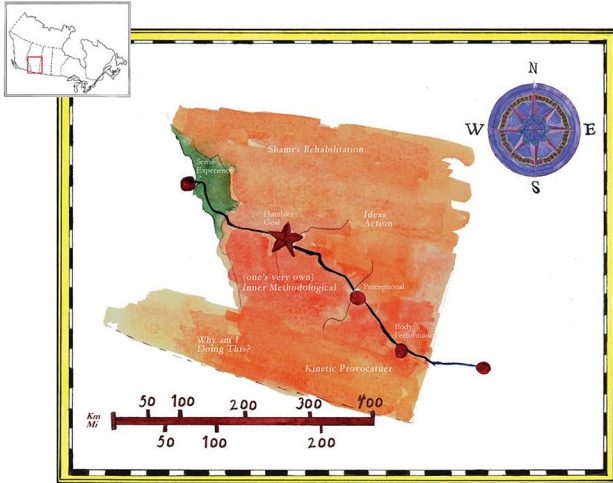
page one hundred three Freedom's Impulsing



Map 7 Freedom's Impulsing

Buoyed Spirits*
41 kms/2 hours 30 minutes
Emotional Silence*
102 kms/5 hours 30 minutes
Uprooting*
87 kms/5 hours
Dwellers Each
110 kms/6 hours
Body Aches
Time and Space to go*
85 kms/5 hours 30 minutes
Turtle's Path*
65kms/5 hours 30 minutes
Truth's Sensation*
48 kms/6 hours
Meanings Unique*
138 kms/8 hours 30 minutes
Serenity*
130 kms/9 hours 30 minutes
Tranquil Passage*
98 kms/8 hours
Paths of Inspiration
152 kms/10 hours 45 minutes
Higher Self
138 kms/10 hours
Generosity*
128 kms/8 hours 30 minutes
Hidden Adventures
Fields of Raw-science*
Roads of Inspiration*
Peaks Gallows*

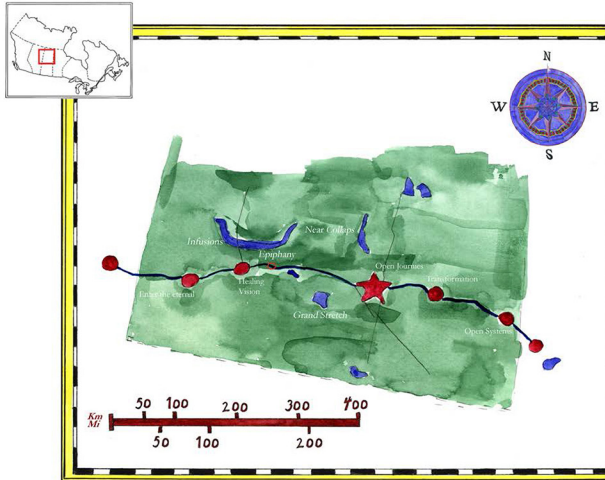
page one hundred thirteen Humbler Goal



Map 8 Humbler Goal

Sense Experiencing*
227 km/ 12 hours
Humbler Goal*
200 km/ 14 hours
Perceptual*
115 km/ 7 hours 30 minutes
Body Performance*
Why am I Doing This*
Kinetic Provocateur*
Inner Methodological*
Shames Rehabilitation*

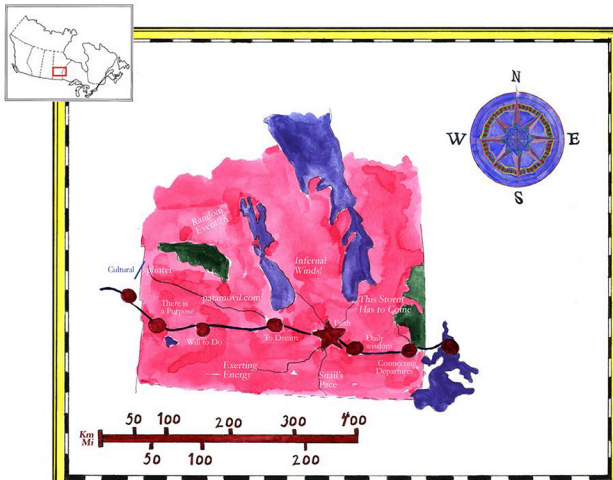
page one hundred thirty three Epiphany



Map 9 Epiphany

Enter the eternal*
82 km/ 5 hours 30 minutes
Healing Vision* (aka Sore seat)
250 km/ 12 hours
Open Journeys*
103 km/ 6 hours 45 minutes
Transformation*
125 km/ 7 hours 30 minutes
Open Systems
Epiphany*
Near collapse*
Influences*

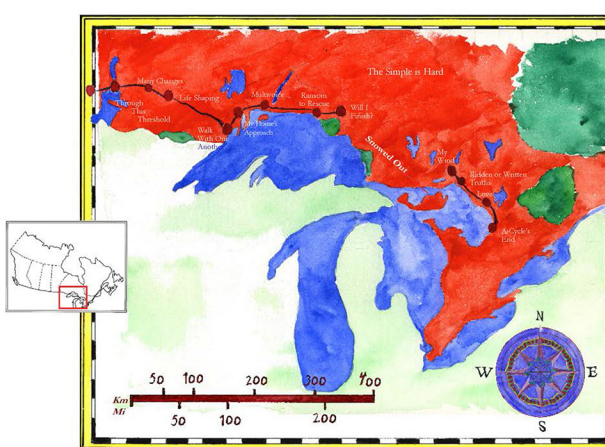
page one hundred forty nine Faith



Map 10 Faith

Cultural Splinter*
Random Event*
There is Purpose*
85 KM/ 8 hours
Will to Do*
130 KM/ 8 hours
To Dream*
88 km/ 5 hours
Faith*
58 km/ 5 hours 30 minutes
Daily Wisdom*
98 km/ 5 hours 30 minutes
Connecting Departures*
Infernal Winds*
This Storm has to Come*
putamovil.com*

page one hundred sixty three Love



Map 11 Love (Home's Return)

The Simple is Hard*
Through a Threshold*
140 kms/ 6 h 40 minutes
Many Changes*
110 kms/ 5 hours
Life Shaping
233 kms/ 12 hours
Walk with One Another*
94 kms/ 5 h 30 minutes
My Home's Approach*
90 kms/ 5 hours
Multivoice*
140 kms/ 8 hours
Ransom to Rescue*
92 kms/ 5 h 30 minutes
Will I finish*
Snowed Out*
My Wind*
60 kms/ 2 h 45 minutes
Ridden or Witten Truths*
115kms/ 6 hours
Love*
115 kms/ 6 hours
A Cycle's End*

FEATURE ARTICLE

Majella-J. Gauthier, Christiane Gagnon
et Carl Brisson¹

Université du Québec à Chicoutimi

Les gaz de schiste au Québec: un inventaire territorial et archéologique

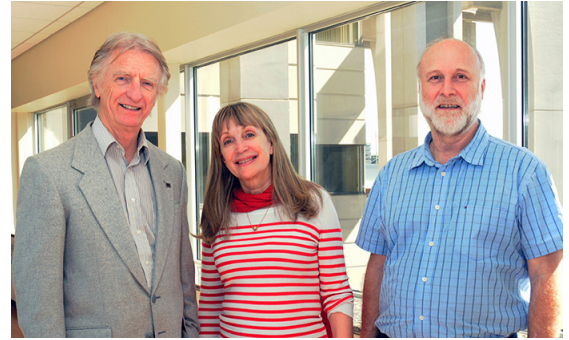
Shale gas in Quebec: a territorial and archaeological inventory

In April 2013, the Quebec government published an expert report in relation to the proposed exploration and exploitation of shale gas in the lowlands of the St. Lawrence. This report was in response to a mandate from the Ministry of Sustainable Development, Environment, Wildlife and Parks as part of the Strategic Environmental Assessment (SEA) of shale gas. The report is part of a series of 77 studies commissioned by the Government on the issue of shale gas.

En avril 2013, le Gouvernement du Québec publiait un rapport d'experts en relation avec le projet d'exploration et d'exploitation des gaz de schiste dans les basses terres du Saint-Laurent. Ce rapport faisait suite à un mandat du ministère du Développement durable, de l'Environnement, de la Faune et des Parcs dans le cadre de l'évaluation environnementale stratégique (ÉES) sur le gaz de schiste. Le rapport fait partie d'une série de 77 études commandées par le Gouvernement sur la question des gaz de schiste.

L'étude visait à combler un manque de connaissances quant aux impacts de cette nouvelle industrie, d'où la mise en oeuvre d'une telle évaluation. Le territoire à l'étude couvrait les basses terres du Saint-Laurent au sud du fleuve, allant grosso modo de Valleyfield à Montmagny.

L'équipe, composée d'une dizaine de chercheurs, a analysé pas moins de 34 672 km² sous divers aspects: l'hydrographie, les aires protégées, les milieux humides, l'espace urbanisé, le potentiel agricole, l'espace agricole, l'espace forestier, les érablières; ainsi des dimensions à consonance patrimoniale comme les territoires d'intérêt (culturel, esthétique, écologique, historique) et les lieux d'intérêt archéologique; à cela s'ajoutent les territoires des Premières Nations.



Majella-J. Gauthier, Christiane Gagnon et Carl Brisson

La méthodologie d'analyse utilisée repose sur l'approche empirique et systémique. Elle a été opérationnalisée par l'intégration cartographique de l'information dans un SIG (Arc-Gis) de manière à bien décrire chaque couche d'information et surtout à dégager des modèles cartographiques utiles à la compréhension du territoire. C'est ainsi qu'ont été élaborées une carte des aires de sensibilité (fig. 1) intégrant aussi les enjeux territoriaux et aussi une carte générales de zones de vulnérabilité intégrant spécifiquement les aires géologiques présentant un potentiel de gaz de schiste.

Le rapport comprend pas moins de 555 pages dont plusieurs sont constituées de cartes thématiques se rapportant aux 28 MRC (Municipalités régionales de comté) et à deux villes: Longueuil et Lévis.

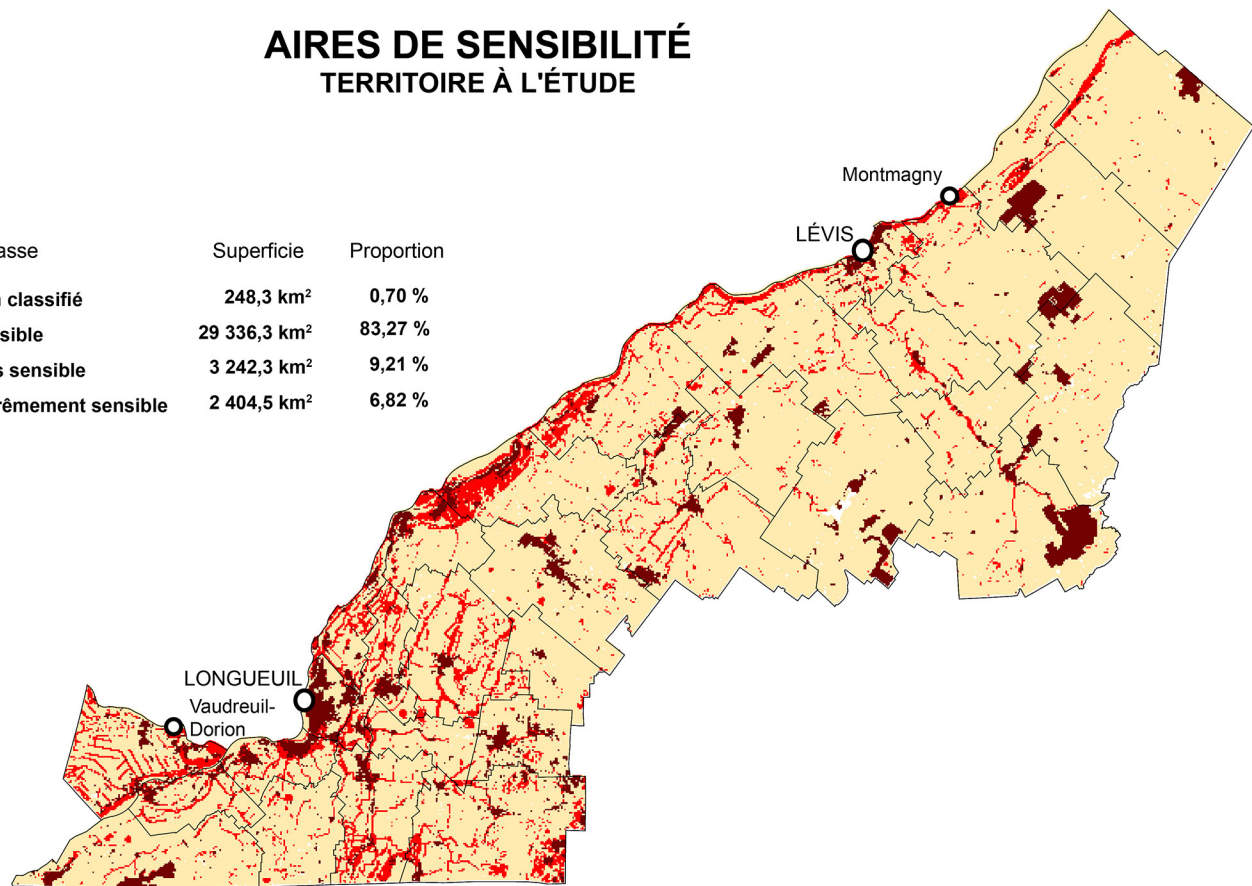
Il est possible de consulter le document sur le WEB à l'adresse suivante:

http://ees-gazdeschiste.gouv.qc.ca/wordpress/wp-content/uploads/2013/03/Rapport-etude-S2-4_UQAC.pdf

¹Gagnon, Christiane et collaborateurs, 2013, *Inventaire territorial des régions québécoises ayant un potentiel d'exploitation des gaz de schiste (Land inventory of Quebec regions having shale gas exploitation potential)*, Université du Québec à Chicoutimi, rapport réalisé pour le ministère du développement durable, de l'Environnement, de la Faune et des Parcs du Québec, 555 p.

AIRES DE SENSIBILITÉ TERRITOIRE À L'ÉTUDE

Classe	Superficie	Proportion
Non classifié	248,3 km ²	0,70 %
Sensible	29 336,3 km ²	83,27 %
Très sensible	3 242,3 km ²	9,21 %
Extrêmement sensible	2 404,5 km ²	6,82 %

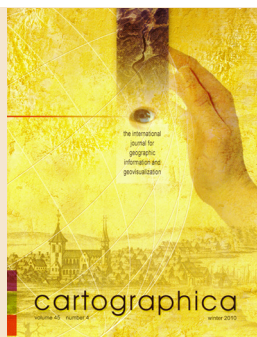


Laboratoire d'expertise et de recherche en
géographie appliquée, laboratoire d'archéologie
UQAC, 2013

Figure 1. Sensitive areas in the studied territory related to shale gas exploitation.
(Three regions in Quebec: Chaudière-Appalaches, Centre-du-Québec et Montérégie).

BACK-ISSUES of CARTOGRAPHICA

I have multiple back issues of the journal since 2004, and would like to free up some shelf space. These might be especially useful to newish members who only have very recent issues. Please email me if you would like any: roger.wheate@unbc.ca



J'ai aussi plusieurs exemplaires de la revue Cartographica depuis 2004, et je voudrais libérer de l'espace d'étagère. Celles-ci pourraient être particulièrement utiles pour les nouveaux membres. Contactez-moi pour en obtenir des copies à roger.wheate@unbc.ca

FEATURE ARTICLE

Margaret A. Schweitzer

Mapping an Ancient Shoreline

Archaeological sites of the late Paleo-Indian period dating to 8,000 years ago have been discovered in the Thunder Bay area. Many of these sites are located along or on modern-day shorelines. Because few sites of this period have been found inland, researchers have suggested a sampling bias.

However, when one studies the geomorphological events in the region immediately following deglaciation some 10,000 years ago, it becomes apparent that the hydrological system was indeed a major influence on the travel patterns of Paleo-Indians. Therefore, the author counters that perhaps sites designated as “inland” did not form a significant portion of the unknown archaeological database after all.

Research is being conducted into the possibility that at least two Paleo-Indian sites that are located two kilometres inland from a modern lake were, in fact, originally located on an earlier shoreline of the same lake. Geographic Information Systems software is employed to test this hypothesis.

Digital Elevation Model data was downloaded from the National Topographic Service, Natural Resources Canada, to create a regional map of the study area, located southwest of Thunder Bay (see map). Rivers, lakes, roads, and railroads were added as map layers and all reprojected into a common theme. A database of archaeological sites was included before two selected sites were highlighted for intensive review.

Within Esri's ArcMap Version 10™, slope values were calculated, as well as contour lines calculated at 15 metre intervals. With the contours labeled, they were compared to the elevations for the two archaeological sites. Although the sites are approximately nine kilometres apart spatially, they share the same elevation above the modern water level of the same lake. Using the Query function, one particular contour was highlighted, and it became apparent that this level (480 masl) was a strong possibility for an ancient shoreline.



Field work in the summer of 2013 will confirm or deny the presence of a shoreline. A transect will be made along a portion of the 480 masl contour, by digging test holes and looking for evidence of beach cobbles and wave action sediments buried beneath modern vegetation. GPS points will be taken and elevation recorded for each test pit. It is hoped that up to three kilometres of potential shoreline may be investigated over a 10-12 week period.

A database will be created of the field work sites and added to the map already created. Statistical analysis will be carried out to determine how well the test pits correlate to the 480 masl contour, and if they indeed indicate an ancient shoreline. Visual analysis of the map will provide a simple comparative display of both the projected and actual shorelines. This will also serve the purpose of determining whether the digital data is of sufficient accuracy and resolution to model further shoreline environments.

Margaret A. Schweitzer is a Masters candidate with the Department of Environmental Studies, Northern Environments & Cultures at Lakehead University, Thunder Bay, Ontario, Canada



Location of study area (courtesy of GoogleEarth).

FEATURE ARTICLE

Claus Rinner¹ and Steffan Voss²

MCDA4ArcMap – An Open-Source Multi-Criteria Decision Analysis and Geovisualization Tool for ArcGIS 10



Claus Rinner



Steffan Voss

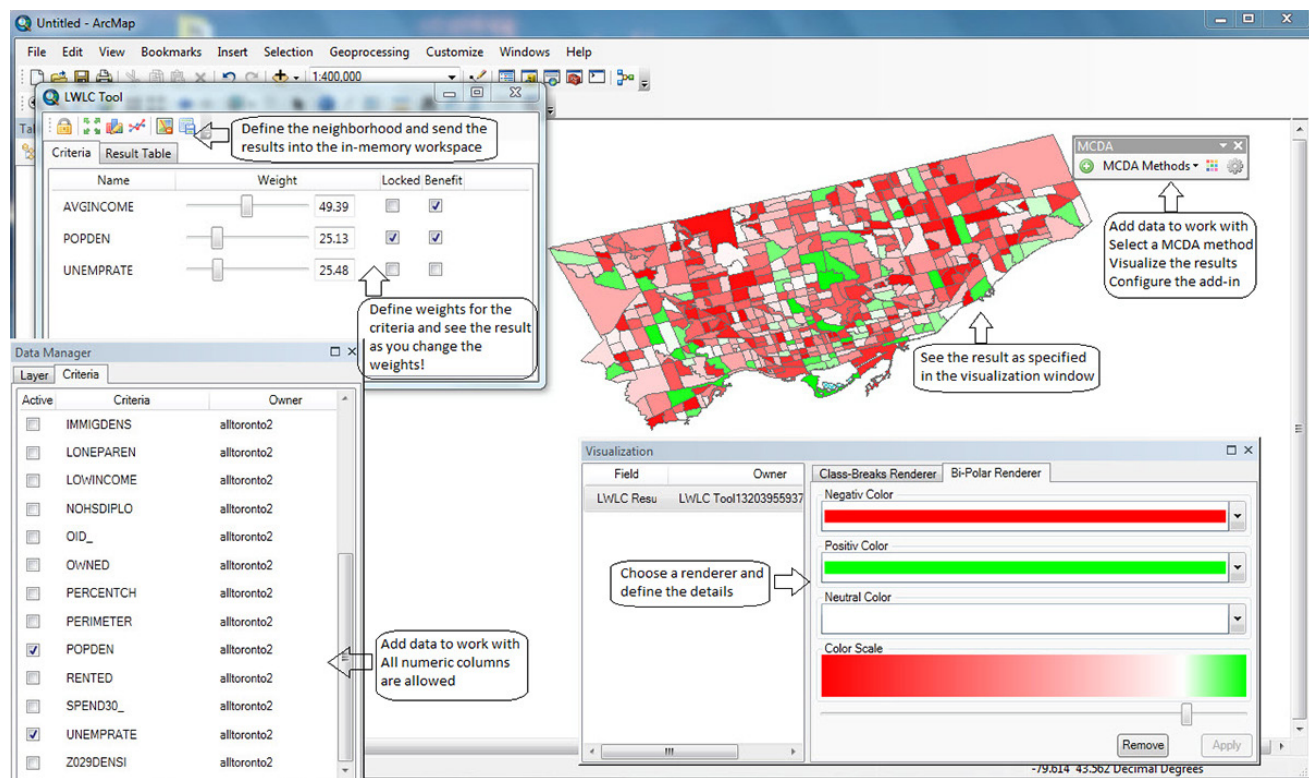
When faced with important decisions, we tend to base our decision-making on a rational framework, which often includes multiple decision criteria. Spatial decision problems have been characterized as a set of geographically defined decision alternatives (locations) with associated criterion values (e.g., Malczewski 1999). Within Geographic Information Systems (GIS), multi-criteria decision analyses (MCDA) tools have been used for decision support in environmental, transportation, and urban/regional planning, in waste management, as well as in hydrology, agriculture, and forestry, to name but a few areas of application (Malczewski 2006). Often, MCDA tools are only loosely coupled with GIS software (e.g., calculations completed in a spreadsheet) or take the form of custom implementations in a GIS scripting/programming environment. Few GIS vendors have integrated generic MCDA functionality in their products, with the notable exceptions of Idrisi's Multi-Criteria Evaluation module and ArcGIS' Overlay Toolset. Both of these operate on raster data layers using map algebra operations to combine cell values into an evaluation score for each candidate location (raster cell).

In this technical note, we present "MCDA4ArcMap", an open-source tool for MCDA and geovisualization of vector data in ArcMap. The analytical functionality of the tool includes three MCDA methods: weighted linear combination (WLC), ordered weighted averaging (OWA), and a local variant of WLC (LWLC). WLC corresponds to the weighted overlay tool that readers may know from ArcGIS. As an extension of the criterion importance weighting in WLC, the OWA method allows the decision-maker to specify a degree of risk in their approach to decision-making. OWA has been implemented previously in Idrisi (Jiang & Eastman 2000). The recently proposed LWLC (Malczewski 2011) adjusts criterion importance weights with regards to the local range of criterion values. Criterion weights are increased in a neighbourhood, if their local range is large relative to their global range in the study area, or decreased if the local range is relatively small. This approach adheres to the range-sensitivity principle that stipulates that criterion

weights should depend on the ranges of criterion values occurring in a specific decision problem.

Given the many parameters that influence MCDA outcomes, previous research has argued for using interactive graphical tools, including thematic maps, to explore the impact of input parameter settings on MCDA results. Jankowski et al. (2001) integrated cutting-edge interactive thematic mapping in CommonGIS (then called "Descartes") with MCDA and data mining techniques. They recommended a map-centred exploratory approach to MCDA that uses maps as "visual thinking" tools according to the modern cartography literature (DiBiase 1990, MacEachren & Kraak 1997). Subsequently, Rinner & Taranu (2006, p.647) noted that "an interactive mapping tool is worth a thousand numbers" referring to the use of "multiple cartographic representations for changing decision-making preferences". Further, with reference to the then-new field of visual analytics, Rinner (2007) suggested that geovisualization should not be limited to exploring massive datasets but be applied to the possibly massive output of analytical processes that results from varying input parameters.

Along these lines of research, the MCDA4ArcMap tool combines advanced MCDA methods with interactive thematic maps. Of the two mapping techniques implemented so far, the unclassed choropleth map is the more exciting. It may be known to readers from the CommonGIS software (e.g., Andrienko et al. 2002) but is rather uncommon in commercial GIS. As seen in the screenshot, this implementation allows the user to specify two colours for the minimum and maximum end of the value range of an attribute (here the MCDA score resulting from the analyst's current parameter settings) as well as a neutral colour and a breakpoint for the diverging colour scheme. With reference to discussion and experimentation by academic cartographers in the 1970s and 1980s, Slocum et al. (2009) note that the unclassed choropleth map accurately portrays numerical data relationships, yet is suitable for the acquisition of general information on spatial patterns (rather than



location-specific information), and may be most useful within an exploratory mapping environment.

MCDA4ArcMap is an ArcGIS add-in released as free software under the Apache License 2.0 and available for download at <http://mcda4arcmap.codeplex.com/>. It is written in the C# programming language within the .NET environment, and integrates with the event handling, editing workflows, and data access procedures within ArcGIS. The "Model View ViewModel" architecture pattern separates the program logic from the user interface. Phase I of the development was completed in January 2013. Anyone in the CCA community is invited to try MCDA4 ArcMap for their own research and practice. If you have ideas for extensions and applications, or encounter issues installing and running it, feel free to contact the authors, or go ahead to improve and use it. As an open-source project, MCDA4ArcMap is only going to be successful if it turns out to be of use to a core group of contributors.

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MAPPING and GIS EDUCATION INTEREST GROUP

Julia Siemer



The mission of the Mapping and GIS Education Interest Group of the CCA is to promote cartographic and GIS education at all levels in Canada. Based on various applied, academic, research, and pedagogical interests shared by its members the interest group facilitates constructive dialog among its members and the larger cartographic and GIS community. The interest group strives to organize sessions and/or workshops at the CCA's annual meetings, in which all cartographers and GIS users including students as well as educators are encouraged to participate.

Over the past years CCA's various mapping competitions have received many high quality entries by students from all over Canada. The display of these maps always attracts the attention of most conference attendees. The competitions are a great opportunity for students to display their work to a wider audience.

I would like to encourage all students (and their instructors to encourage their students) to consider submitting a map to one of the following competitions. All students enrolled at a Canadian university or college are eligible to submit their maps made in the 2012/13 academic year.

President's Prize

Submit a thematic map on any subject. A thematic map is a map that is meant to communicate a specific subject matter within a particular geographic area. They are often defined as special purpose maps and can be either quantitative or qualitative in nature. The International Cartographic Association (ICA) defines the thematic map this way: "A map designed to demonstrate particular features or concepts. In conventional use this term excludes topographic maps". Maps submitted to this competition should deliver a strong message, be analytical in nature, apply cartographic principles and be designed as a paper map. The entry form can be downloaded from CCA's website (<http://www.cca-acc.org/presidents-prize.asp>)

Carto-Quebec Prize

Map submissions for this competition follow the same guide-

lines as the President's Prize but are required to be in French. The entry form for this competition is available on the CCA's website (<http://www.cca-acc.org/carto-quebec.asp>)

Dynamic Mapping Competition

For this competition, submit a dynamic thematic map of any subject. A dynamic map provides the user with a unique user interface to access the map's interactive features. The map should be creative, clear in its message, be based on cartographic principles and be easily accessible.

To submit a map to this competition, send an e-mail to the chair of the interest group (julia.siemer@uregina.ca) with information about the map as specified on CCA's website (<http://www.cca-acc.org/dynamic-map.asp>)

Although the website mentions May 17 as submission deadline, I will bring all submissions to the meeting in Edmonton that are in my office before June 8, 2013.

I hope we will be able again to display a wide variety of maps and demonstrate the good quality cartographic work that is done by students and instructors at Canadian universities and colleges. See you in Edmonton.

After serving as interest group chair for the last three years Julia has accepted to act as chair of the Mapping and GIS Education Interest Group (formerly Cartographic Education Interest Group).

Julia is currently an Associate Professor in the Department of Geography at the University of Regina. Prior to this position she was the map editor and chief cartographer of the GIS-based Demographic Atlas of Albania, a first volume of the National Atlas of Albania. She has also held positions as cartographer in publishing houses in Germany and Switzerland and has taught cartography, GIS, and geography courses at University of Potsdam, University of Applied Sciences Berlin, Germany, and the University of Regina.

MAPPING TECHNOLOGIES and SPATIAL DATA INTEREST GROUP

Paul R.J. Wozniak



Content Management Opens the Door for 'Big Data'

The emergence of Open Government, Big Data, Cloud Computing, and Online Collaboration has fostered development of a new infrastructure for creating and using maps. In this environment maps exist in the ambiguous cyberspace of the World Wide Web, with the roles of the cartographer and the cartographic discipline becoming increasingly difficult to define. This natural evolution of the map is driven by democratization of spatial data and accompanying technologies that will empower future generations to become global citizens that have greater awareness of their place in the world.

The Cyber Cartography Interest Group will present how advances in technology are creating and using digital spatial data content for producing and using maps. This will equip cartographers with the information needed to find their place in this new world of maps, and provide a frame of reference to identify how the cartographic discipline is responding to the changes that are shaping new perceptions of maps and mapping.

A few years ago, if someone told you that they were on a

“...mission to organize the world’s information and make it universally accessible and useful...” (from: <http://www.google.ca/intl/en/about/company/>)

you might have wondered, “Who came up with that idea and how is it even possible?” Well, it was likely Larry Page and Sergey Brin, the co-founders of Google Inc., and it is their company’s [mission statement](#). What they are hedging their company’s prosperity on is ‘Big Data’. In the previous issue of Cartouche I referred to this term in the Mapping Technologies and Spatial Data (MTSD) Interest Group (IG) mission statement and it requires some context. Gartner Inc., a leading technology advisory firm, has provided a comprehensive [definition](#)¹ for ‘Big Data’ and estimates the underlying technologies will [demand 4.4 million jobs by 2015](#). Other firms like IBM also provide [information and services](#) for understanding and implementing the various technology facets of ‘Big Data’. In one publication, IBM

authors devote 15 pages to defining the term ([Zikopoulos et al., 2013](#)), indicating the level of complexity involved.

In leveraging ‘Big Data’ technologies, a company like Google Inc. has an edge in achieving its mission because it has a spatial data infrastructure as well as the potential for enabling temporal analytics using Google Earth™ historical imagery (see Figure 1 on next page). Google’s map services are a ‘Big Data’ implementation that can be enabled with analytics, another key facet under the ‘Big Data’ umbrella. Analytics are what will make the ‘useful’ part of Google’s mission statement possible. Here is where the [Apache™ Hadoop®](#) software library enters the scene, providing tools that facilitate access to large amounts of unstructured data and content from distributed clusters of computers. This technology facet is intended to leverage what Gartner refers to as “[dark data](#)”. The data are ‘dark’ because presently large volumes of data maintained by organizations are a ‘black-box’ asset that cannot be seen directly (Sicular, 2013) or used for analytics to answer business questions, study natural and anthropogenic phenomena, or develop policy.

The significance of ‘Big Data’ for government in the US is recognized, and state and local governments have an interest in [leveraging ‘dark data’](#) but lack IT infrastructure and personnel to process and analyze data and content. The promise of analytics lies in frameworks like Gartner’s “[Pattern-Based Strategy](#)” modeling and IBM’s [InfoSphere BigInsights](#) and [InfoSphere Streams](#) solutions that are built on Hadoop® but have added enterprise security (Zikopoulos et al., 2012). [Enterprise security](#) is one critical aspect of the technologies that must be managed, and the veracity or integrity of the data/content is another, especially for governments that manage sensitive information but want to use their information and knowledge assets for decision making and policy development in the interest of the public’s well being.

In the case of data/content integrity, having established technol-

¹The full Gartner report on [The Importance of ‘Big Data’: A Definition](#) can be downloaded for US \$195.00.

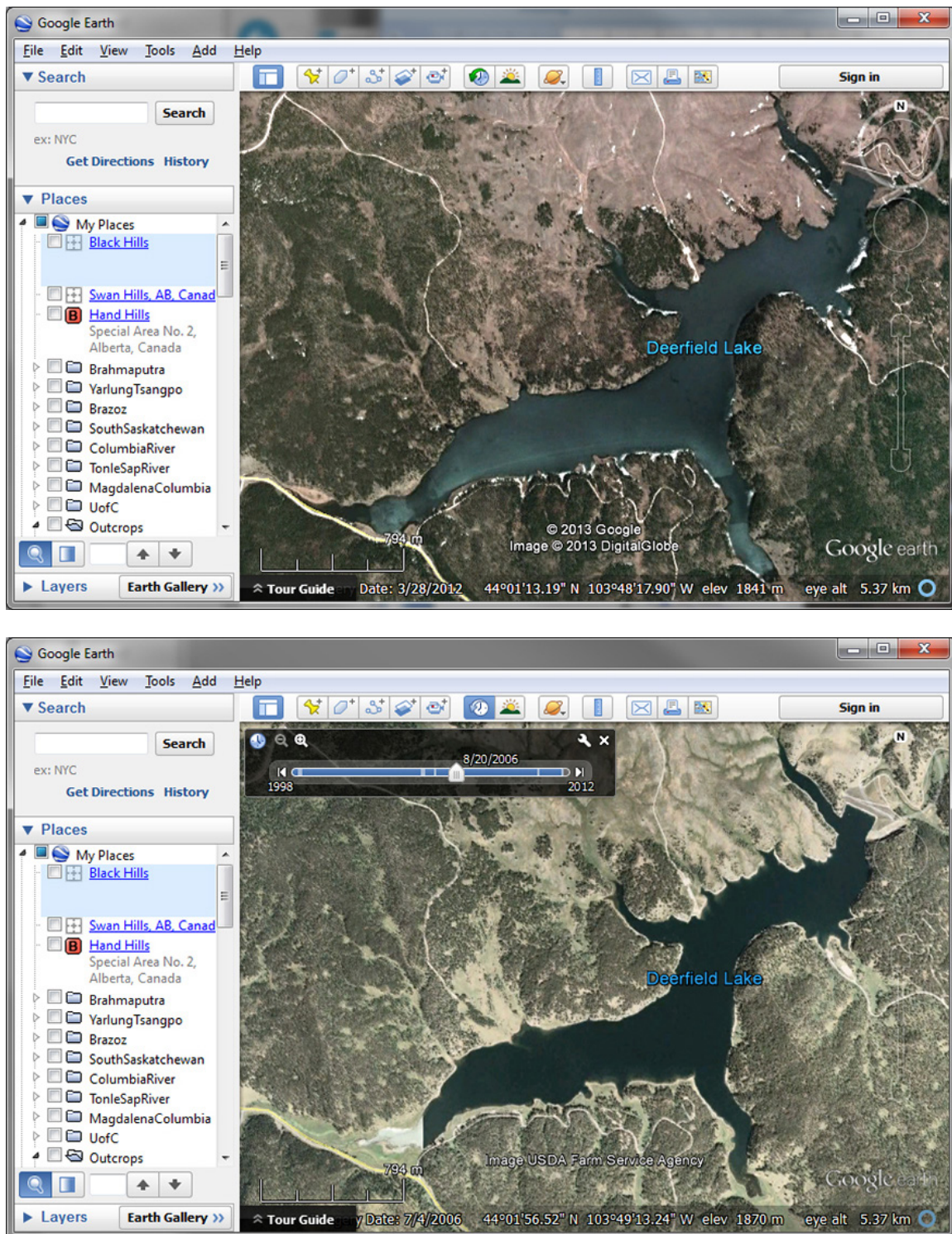


Figure 1. The Google Earth™ historical imagery tool (bottom) allows for comparison of imagery from 2012 (top) and 2006 (bottom). If the map application also has access to elevation data (DEM) and required analytical tools, the type of water level difference observed in Deerfield Lake between March 2012 (top) and July 2006 (bottom) could be combined with area measurements of water level slices to calculate the amount of water reduction that might be expected to occur over the summer months. Map data ©2012 Google.

ogies, such as [content management](#), in place becomes an advantageous precursor for implementing 'Big Data'. Mature content management infrastructure and practices not only improve integrity with required metadata, but can reduce the amount of data/content that must be managed and analyzed by facilitating [lifecycle management](#). The Government of Canada is in the early stages of implementing its GCDOCS content management system built on OpenText Corporation [Enterprise Information Management](#).

Natural Resources Canada (NRCan) has a wealth of [spatial data](#), and combining this with its trusted knowledge based information from a content management system using 'Big Data' analytics can significantly improve this government department's ability to achieve its three [strategic outcomes](#): 1) Canada's Natural Resources Sectors are Globally Competitive; 2) Natural Resources Sectors and Consumers are Environmentally Responsible; and 3) Canadians have Information to Manage their Lands and Natural Resources, and are Protected from Related Risks.

The private sector also has an eye on the future of 'Big Data' applications. [IDC Energy Insights](#) is a service provider for the Oil and Gas industry and has recognized the potential for integrating seismic, drilling, and production data. Presently, in many organizations, these data are stored separately in different departments and are not easily shared. IDC Energy Insights also believes that enhanced recovery and development of [unconventional resources](#), shale gas and tight oil, will benefit from innovative use of 'Big Data', but they emphasize that data quality is a key factor for ensuring success of the data mining that will support this type of work.

Esri, a GIS solutions provider, views 'Big Data' as an [emerging technology](#) and identifies potential for the use of [GIS with 'Big Data'](#) in Disaster Relief, Financial, Government, Insurance, Natural Resources, Retail, Telecommunications, and Utilities. Considering the types of questions that will be asked and how the answers will be sought using 'Big Data' and GIS, the integrity of the data/content will be paramount, and it will be more important than ever that organizations ensure their content management is in order. The pace at which these technologies evolve will only increase, and the way they have already merged in applications such as Google Earth™ provides a glimpse of how they will affect future map making.

It is with some reluctance that I now step down from chairing this Interest Group (IG), as we appear to be on the verge of very interesting and exciting times for MTSD. I was nominated

as chair for the IG in 2009 when its focus was on map publication production, but I immediately recognized that a name change was required to reflect the changes occurring in mapping technologies. The name change was accepted and I feel confident that I have steered the group onto a good path. It is now time for others to take it to the next level, and with the technological changes that have occurred over the last five years, another name change with new directions for the IG should be welcomed with open minds.

I would like to take this opportunity to thank Roger Wheate who nominated me for the chair position and thus allowed me to share my thoughts and vision with this community. I also thank the CCA and its executive for supporting my travel to the annual general meetings and for the opportunity to participate in the executive meetings to contribute to shaping the future direction of the Association.

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Paul graduated with a BSc. in Geography from the University of Calgary in 1987 and later returned to the University of Calgary Geoscience Department for his M.Sc. in Geology/Hydrogeology, 2011. He studied Cartography under Dr. Michael Coulson and Roger Wheate and was a student in the first GIS course offered by Nigel Waters in the University of Calgary Geography Department. His study of cartography and exposure to GIS in its early days has provided a more theoretical and forward looking appreciation of mapping concepts that he has applied to his work at the Geological Survey of Canada since 1988.

WORKSHOP RECAP

Roger Wheate

GeoCart' 2012 and the ICA Mountain Cartography workshop: New Zealand, August 29-31 and September 1-5



I felt obliged to attend the 2012 mountain cartography workshop, as the likely organizer for the next one in 2014 somewhere in the Rocky Mountains, but didn't need much persuading after seeing the promo photo showing Mt. Ngauruhoe, which doubled as Mt. Doom in the Lord of the Rings trilogy. The workshop was organized to take advantage of the biennial GeoCart national cartographic conference, occurring just beforehand, also convened by the New Zealand Cartographic Society (NZCS) along with the School of Environment, University of Auckland, in the "City of Sails". In addition, I could join a mate in Melbourne and compete in the Kangaroo Hoppet in the Alpine Shire of Falls Creek – the only international cross-country ski Loppet in the southern hemisphere.

The GeoCart organizers had the good common sense to add \$50 for non-members registration, with membership priced at \$50, so of course I joined up. This was also designated as an ICA regional symposium for Australasia and Oceania, but the attendees were mostly Kiwis. As I later discovered from the few Aussie delegates, despite having some high profile cartographers, their country does not have a well-established society nor community. As an ICA regional symposium, attendees included the current and past ICA presidents (Georg Gartner and Bill Cartwright), along with the past (recent) ICA secretary-general (David Fairburn).

Each half-day commenced with a plenary session presentation – an excellent way to unite the attendees and enable announcements. These and the conference itself covered the spectrum of avenues for cartographic solutions: using non-GIS graphic software, using GIS only, and using GIS for data assembly and then graphics software for massaging final output. Plenary speakers were Tom Patterson (US National Park Service), Aileen Buckley (Esri), Roger Smith (Geographx, NZ), George Gartner (Vienna University of Technology and ICA), and David Fairburn (Newcastle University). The GeoExpo'2012 illuminated the concourse with many fine map products on display. Throughout, the conference sparkled with the influence of Roger Smith (GeographX) who in the first concurrent session described the making of the world's largest atlas – Earth Platinum. Each page at 6 x 4.5 feet (6 x 9 feet double page display)

requires two people to turn; there are only 31 copies sold and priced at \$100,000 each.

The two concurrent sessions through most of the three days were generally divided between maps and cartography, versus geospatial analysis and 3D applications (the program can be viewed at the link below). The only downside of the conference was the need to choose and miss half of these each day. The annual meeting at the end of the second day was a typically relaxed friendly affair. The NZCS is moderate in size, only recently exceeding 40 members. I was right chuffed that my new membership just enabled the 20 needed for quorum. The group warmly thanked Geoff Aitken for all his work over the years for NZ Cartography.

The whole conference was a delightful experience, convened and co-organized by Geoff Aitken (New Topo NZ), Igor Drecki (U. Auckland), Antoni Moore (U. Otago), and Roger Smith, and moderated by Andrew Steffert (Horizons Regional Council). I should plan to return in 2014 or more likely 2016; the CCA might well in the future consider this biennial conference format. Cartographers planning to head downunder in an even number year, should look to include the GeoCart meeting at the end of August in Auckland.

Geocartprogram:

<http://web.env.auckland.ac.nz/public/geocart2012/>

New Zealand topographic maps online viewer:

<http://www.topomap.co.nz/>

World's largest atlas:

<http://www.millenniumhouse.com.au/title-earth-plat.html>

The next day, we headed south in a \$19/day vehicle from JUCY El Cheapo car rentals (!), myself and two US cartographers (Tom Patterson and Nate Kelso), driving on the left for a change, though so was everyone else. We passed craters of the moon (geothermal), and a Macdonalds restaurant attached to a DC10 airplane, with views across Lake Taupo to Tongariro National Park, the location for the mountain cartography workshop, about five hours drive from Auckland. I further relished the trip downunder when

Mt. Tongariro erupted for the first time in over 100 years just three weeks earlier (it has since erupted again on November 20), closing some of the trails we were planning to hike on our free day. We arrived at the site in good weather to view the volcano still puffing, and sporting sunset hues. The first evening included a fine dinner – a preview of the topnotch catering we would enjoy for the next few days, and welcomes from the local chair Geoff Aitken and Commission chair Karel Kriz. The evening capped off with a talk on the park geology by Harry Keys, Department of Conservation.

The workshop was held in the Sir Edmund Hillary Outdoor Pursuits Centre (OPC), in a remote central area of the North Island adjacent to the Tongariro National Park. OPC is an ideal base for a variety of activities for every season, walking, river kayaking and mountain biking to skiing, ski touring and mountaineering. The first day was set for outdoor activities – a masterstroke with rainy weather the rest of the week. Several groups were formed based on fitness and outdoorsmanship, with activities ranging from ski-trekking and downhill skiing to volcano-cramponing, forest trail walking, snow hiking and shopping. Fig 1 shows us in front of 'Mt. Doom' (that's me on the left).

This would be the 8th Mountain Cartography biennial workshop organized by the ICA Commission and here also the NZCS (the same foursome as GeoCart plus Christian Fremd (GeographX)), and the first one in the southern hemisphere – and only the second outside Europe (the 3rd workshop in 2002 was held at Mt. Hood, Oregon). The exotic location involved fewer participants than most previous workshops, but this was more than compensated by the spectacular location and joie de vivre/bonhomie of those present, numbering 26 from Argentina, Austria, Canada, Germany, Norway, Slovenia, Switzerland, USA along with the host nation.

We enjoyed three days of presentations (with an afternoon off for a rainy hike) in sessions on mountain and glacier mapping, user studies and mobile media, professional cartography and a final session entitled 'from the ocean floor to the mountain tops'. The theme of the workshop was 'mapping mountain dynamics: from glaciers to



Figure 1: On the slopes of "Mt. Doom"

volcanoes' and talks ranged from '50 years on Everest' to a relief map of the Hawaiian sea floor. The local speakers were especially appreciated to enhance our experience of the NZ landscape, with Geoff Aitken showcasing the remarkable hand-drafted Trampers' Map of the Tararua Mountain System 1936, and the new topographic mapping in his current endeavours, while Roger Smith gave a superbly illustrated expose on Relief Maps and Geomorphology, in addition to his poster maps around the meeting room, including the 3D photo-realistic map of the park created for this workshop (below); shaded relief renditions were ubiquitous throughout the proceedings; the presentations are available online.

Workshop Program including abstracts:

<http://web.env.auckland.ac.nz/public/mcw2012/programme.htm>

Complete presentations and photos: http://www.mountaincartography.org/activities/workshops/taurewa_nz/index.php

GeographX (3D maps): <http://geographx.co.nz/>

The next workshop is planned for April 2014 in the Canadian Rocky Mountains (Banff/Jasper). For more information, please contact: wheate@unbc.ca



2013 President's Prize Competition

The CCA President's Prize recognizes excellence in student map design and production and is open to all post-secondary students who have completed and produced a cartographic project in the preceding school year. The 2013 President's Prize Competition will consist of two prizes of \$200, one for entries from college-level or CEGEP students, and one for entries from university level undergraduate students in the following category:

A thematic map on any subject. A thematic map is a map that is meant to communicate a specific single subject matter within a particular geographic area. They are often defined as special purpose maps and can be either quantitative or qualitative in nature. The International Cartographic Association (ICA) defines the thematic map this way: "A map designed to demonstrate particular features or concepts. In conventional use this term excludes topographic maps" (Dent 1999, 8).

Entry Guidelines:

The cartographic project will consist of a single map. There are no restrictions on size but the project must have been completed and produced during the school year preceding the competition. Each entry must be accompanied by a clear and succinct statement of design objectives that will weigh heavily in the judges' decision.

Entries will be judged on the basis of creativity and overall effectiveness in communication as well as excellence in compilation, design, and layout.

Entries for 2013 are invited from all Canadian post-secondary students. All entries should be accompanied by an official entry form found on page 22 or on the CCA website (www.cca-acc.org). Check website for deadlines. Mail submissions to:

CCA President's Prize Competition
c/o Dr. Julia Siemer
Assistant Professor of Geography
Cartography and GIS
University of Regina
Department of Geography
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2

Concours pour le Prix du Président 2013

Le Prix du Président de l'ACC reconnaît l'excellence dans la conception et la production cartographiques par des étudiants. Tous les étudiants du niveau postsecondaire qui ont terminé et produit un projet cartographique au cours de l'année scolaire précédente sont admissibles. Le concours pour le Prix du Président 2013 décernera deux prix de 200\$, un pour les soumissions de niveau collégial et un pour celles d'étudiants du premier cycle universitaire, dans la catégorie suivante:

Carte thématique de n'importe quel sujet. Une carte thématique, aussi appelée carte à sujet unique, est une carte qui met l'accent sur un thème spécifique ou unique dans une zone géographique particulière. Elles sont souvent définies comme des cartes à usage spécial et peuvent être soit quantitatives ou qualitatives. L'Association cartographique internationale (ACI) définit une carte thématique comme suit: «Une carte conçue pour démontrer des détails cartographiques ou concepts particuliers. Selon l'usage conventionnel ce terme exclut les cartes topographiques» (Dent 1999, 8).

Critères d'inscription:

Les projets cartographiques consisteront d'une seule carte. Il n'y a pas de restriction quant à la taille de la carte mais il faut que le projet ait été terminé et produit au cours de l'année scolaire précédant le concours. Chaque soumission devra être accompagnée d'un énoncé court et clair sur les objectifs de la conception de la carte. Cet énoncé sera crucial pour la décision du jury.

Les soumissions seront jugées selon la créativité et la façon dont le message est présenté ainsi que l'excellence de la préparation, la conception et la présentation du projet.

Le Président de l'ACC invite tous les étudiants canadiens de niveau postsecondaire à soumettre leur projet cartographique. Toutes les soumissions doivent être accompagnées d'un formulaire officiel de participation, disponible à la page 23 ou sur le site Web de l'ACC (www.cca-acc.org). Consultez le site Web pour les dates limites. Envoyer les soumissions à:

Prix du Président de l'ACC
a/s Dr. Julia Siemer
Assistant Professor of Geography
Cartography and GIS
University of Regina
Department of Geography
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2

2013 Carto-Québec Prize

The CCA is pleased to announce the offering of the Carto-Québec Prize, a special annual competition for the best student-authored cartographic product created in French. The award has been established through a donation from the former Carto-Québec Association to promote and recognize excellence in map design.

The competition is open to all post-secondary students in Canada who have completed and produced a cartographic project in the preceding school year. The Carto-Québec Prize will consist of two awards of \$500, one for entries from college-level or CEGEP students, and one for entries from university-level undergraduate students.

Entry Guidelines:

Cartographic projects will consist of a map or a map series forming a coherent whole and may be submitted in any finished form (on paper or other medium). Entries submitted in electronic media, whether GIS or internet mapping applications, should not require specialized software for viewing.

There are no restrictions on the size of the map project or subject but the project must have been completed and produced during the school year preceding the competition. All documents must be in French.

Entries will be judged on the basis of creativity and overall effectiveness in communication as well as excellence in compilation, design, and layout.

Entries for 2013 are invited from all Canadian post-secondary students. They should be accompanied by an official entry form found on page 22 or on the CCA website (www.cca-acc.org). Check website for deadlines. Mail submissions to:

Carto-Québec Prize Competition
c/o Dr. Julia Siemer
Assistant Professor of Geography
Cartography and GIS
University of Regina
Department of Geography
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2

Concours pour le Prix Carto-Québec 2013

L'ACC a le plaisir d'annoncer le Prix Carto-Québec. Ce concours annuel, ouvert aux étudiants postsecondaires à travers le Canada, sera décerné pour le meilleur produit cartographique créé en français.

Ce prix a été établi grâce à un don de l'ancienne Association Carto-Québec pour promouvoir et reconnaître l'excellence dans la conception des cartes. Le Prix Carto-Québec comprendra deux prix de 500\$, l'un pour les soumissions de niveau collégial et l'autre, pour le niveau du premier cycle universitaire.

Critères d'inscription:

Les projets cartographiques comprendront une carte ou une série de cartes formant un ensemble cohérent et pourront être soumis en version imprimée ou autre. Les soumissions électroniques, qu'elles comportent des applications SIG ou de l'Internet, ne doivent pas nécessiter de logiciel spécialisé pour les visualiser. Il n'y a aucune restriction concernant la taille ou le sujet de la carte, mais le projet doit avoir été fait au cours de l'année scolaire précédant le concours. Le projet doit être produit en français.

Les soumissions seront jugées selon la créativité et la façon dont le message est présenté, ainsi que l'excellence de la préparation, la conception et la présentation du projet.

Le Président de l'ACC invite tous les étudiants canadiens de niveau postsecondaire à soumettre leur projet cartographique.

Toutes les soumissions doivent être accompagnées d'un formulaire officiel de participation, disponible à la page 23 ou sur le site Web de l'ACC (www.cca-acc.org). Consultez le site Web pour les dates limites. Envoyer les soumissions à:

Prix Carto-Québec
a/s Dr. Julia Siemer
Assistant Professor of Geography
Cartography and GIS
University of Regina
Department of Geography
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2

CCA Prizes Entry Form 2013

Award:

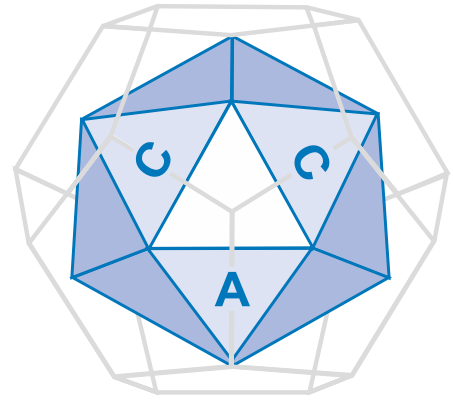
- ☐ President's Prize ☐ Carto-Québec Prize

Post-secondary category:

- ☐ College or CEGEP Year or Level: 1 2 3 4 5
☐ University

President's Prize Category:

- ☐ Thematic Map



Instructor's name and course name/number: _____

In a clear and concise manner, state your design objectives of your project and provide a rationale for your design choices:

In order to be eligible, this form must be submitted with your entry. Check website for deadlines.
 Send entries to:

CCA President's Prize or Carto-Québec Prize
 c/o Julia Siemer
 Assistant Professor of Geography
 Cartography and GIS
 University of Regina
 Department of Geography
 3737 Wascana Parkway
 Regina, Saskatchewan
 S4S 0A2

Formulaire de participation des Prix ACC 2013

Prix:

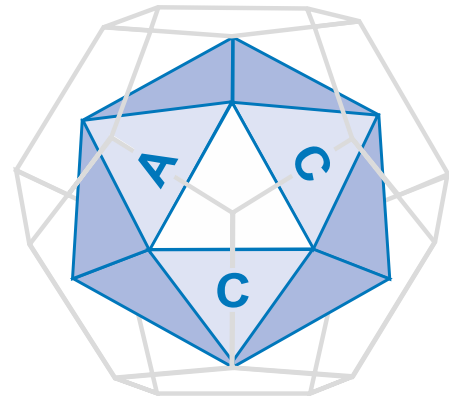
- ☐ Prix du Président ☐ Prix Carto-Québec

Catégories post-secondaires:

- ☐ Collège ou CEGEP année ou niveau 1 2 3 4 5
☐ Université

Catégorie Prix du Président:

- ☐ Carte thématique



Noms de l'instructeur et du cours numéro: _____

Dans un style clair et concis, indiquez vos objectifs de conception de votre projet et fournissez une justification de vos choix de conception:

Pour être admissible, ce formulaire doit être soumis avec votre inscription. Consultez le site Web pour les dates limites.

Envoyer les soumissions à:
ACC, Prix du Président ou Prix Carto-Québec
a/s Julia Siemer
Assistant Professor of Geography
Cartography and GIS
University of Regina
Department of Geography
3737 Wascana Parkway
Regina, Saskatchewan
S4S 0A2

Norman Nicholson Scholarship

The purpose of the award is to recognize and encourage exceptional student achievement and ability in any aspect of cartography. The award consists of a certificate and a cheque for \$500.

Eligibility:

The award shall be made to a student in good standing who is registered full-time in a recognized college or university program. The student must be a Canadian citizen or landed immigrant.

The student should have the following student status: entering the final year of a community college or CEGEP program in cartography, OR entering the final year of an undergraduate honours program with a concentration in cartography, OR a student accepted into or enrolled in a graduate program with a concentration in cartography.

Any student awarded this scholarship is not eligible in any subsequent year. The award is tenable only in the year in which it is granted.

Application:

A student member who wishes to compete for the award will submit an application consisting of the following:

- An official transcript of all college or university courses completed and grades received.
- Letters of recommendation from two faculty members who are familiar with the student's work and capabilities. Letters of Recommendation are to be sent directly to the Awards Committee.
- A one-page statement from the student regarding plans for continuing education in cartography.

The application will be submitted to the Awards Committee of the Canadian Cartographic Association by March 15th of the year in which the award is to be granted.

Your application and all letters of recommendation should be sent to:

Elise Pietroniro
Secretary, Canadian Cartographic Association
708 Paul Metivier Drive,
Nepean, Ontario
K2J 2T4

For more detailed information concerning the Norman Nicholson Scholarship please read the following:

<http://www.cca-acc.org/norman-nicholson.asp>

Bourse Norman L. Nicholson

Le but de ce prix est de reconnaître et d'encourager les étudiants qui ont fourni un accomplissement et une compétence exceptionnels dans un aspect de la cartographie. Ce prix consiste en un certificat ainsi que d'une bourse d'études de 500\$.

Éligibilité:

Ce prix sera remis à un étudiant en règle inscrit à temps plein dans un programme collégial ou universitaire reconnu. Cet étudiant devra être citoyen canadien ou résident permanent.

Cet étudiant devra être dans l'une des situations suivantes: entrer dans la dernière année d'un programme en cartographie d'un collège communautaire ou CEGEP, OU entrer dans la dernière année d'un programme universitaire de premier cycle spécialisé avec concentration en cartographie, OU un étudiant qui a été accepté ou qui est inscrit dans un programme d'études supérieures avec concentration en cartographie.

Tout étudiant qui recevra cette bourse d'études ne pourra être éligible pour une année ultérieure. Ce prix n'est valide que pour l'année de son attribution.

Poser sa candidature:

Un étudiant membre de l'Association qui désire concourir pour cette bourse d'études doit soumettre sa candidature comprenant les éléments suivants:

- *Un relevé de notes officiel de tous les cours collégiaux ou universitaires complétés dont les notes ont été reçues.*
- *Une lettre de recommandation de deux membres de la faculté qui sont familiers avec le travail et les capacités de l'étudiant. Les deux lettres de recommandations doivent être directement envoyées au Comité du Prix Norman L. Nicholson.*
- *Un document d'une page où l'étudiant exposera ses plans futurs concernant la poursuite de son éducation en cartographie.*

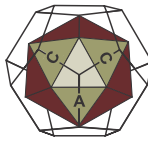
La demande sera soumise au Comité du Prix Norman L. Nicholson de l'Association canadienne de cartographie au plus tard le 15 mars de l'année de l'attribution du prix.

Votre candidature, ainsi que les lettres de recommandation, doivent être envoyées à l'adresse suivante:

Elise Pietroniro
Secrétariat, Association canadienne de cartographie
708 Paul Metivier Drive,
Nepean, Ontario
K2J 2T4

Pour de plus amples informations concernant la bourse Norman L. Nicholson veuillez consulter la page :

http://www.cca-acc.org/norman-nicholson_fr.asp



All fees are in Canadian dollars (no GST). Please note the additional mailing costs for members outside of Canada.

A \$25 fee will be charged for any NSF cheque.

Donations may be made to the Nicholson Scholarship fund.

Tous les frais indiqués sont en dollars canadien (TPS non incluse). Veuillez noter qu'un coût postal supplémentaire s'applique pour les membres hors-Canada.

Des frais de 25\$ sont applicables pour les chèques sans fond (NSF).

Nous acceptons les dons pour le fond de la bourse Norman Nicholson.

Address / Adresse:

Please make changes where necessary. / S.V.P. indiquer les modifications s'il y a lieu.

Name / Nom _____

Street / Rue _____

City / Ville _____

Prov / State _____

Country / Pays _____

Postal Code / Code Postal _____

E-mail / Courriel: _____

(must provide e-mail to receive Cartouche / fournir courriel pour recevoir Cartouche)

Tel (business) / Tél (bureau): _____

Tel (home) / Tél (domicile): _____

Fax / Télécopieur: _____

**Please indicate relevant interest groups /
S.V.P. indiquez vos groupes d'intérêt:**

- ☐ Map Production Technology / Technologie Cartographique
- ☐ Cartographic Education / Éducation
- ☐ Map Use and Design / Conception et Utilisation des Cartes
- ☐ History of Cartography / Histoire de la Cartographie
- ☐ GIS and Geovisualization / SIG et Géovisualisation

☐ New Member / Nouveau membre

☐ Regular / Régulier (1yr / année \$90)

☐ Retired / à la retraite (1 yr / année \$45)

☐ Student / Étudiant (1 yr / année \$45)

Educational Institution / Nom de l'institution fréquentée:

☐ Family / Famille (1 yr / année \$110)

Two names / Nom des deux membres:

☐ Corporate / Entreprise (1 yr / année \$200)

Company Name / Dénomination sociale:

Two Representatives / Noms des deux représentants:

☐ Institutional / Institutionnel (1 yr / année \$45)

Institution Name / Nom de l'institution:

One Representative / Nom de un représentant:

Institutional membership receives Cartouche only.
Les membres institutionnels reçoivent Cartouche seulement.

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☐ Outside Canada (\$10) / À l'extérieur du Canada (10\$)

☐ Online access to Cartographica (\$5)

(must supply e-mail for this option)

Accès à Cartographica en-ligne (5\$)

(doit fournir une adresse courriel pour cette option)

Donation / Don: _____

TOTAL / TOTAL: _____

Payment / Paiement:

☐ Cheque (cheques payable to Canadian Cartographic Association)
Chèque (chèque à l'ordre de l'Association canadienne de cartographie)

☐ VISA

☐ Mastercard

Exp. Date:

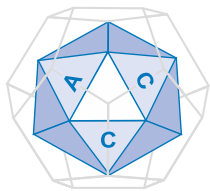
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Card Number / Numéro de la carte:

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**Please Return to /
Veuillez expédier à:**

Canadian Cartographic Association
c/o Paul Heersink, Treasurer
39 Wales Avenue
Markham, ON L3P 2C4
Fax: 416-446-1639
treasurer@cca-acc.org



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

www.cca-acc.org

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E-mail: treasurer@cca-acc.org

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Mount Royal University
Calgary, Alberta T3E 6K6
E-mail: smueller@mtroyal.ca

Cartography 2.0 (Emerging Mapping Technologies / Cartographie 2.0 (technologies de cartographie émergentes)

Cameron Wilson

Mapping and GIS Education / Cartographie et l'enseignement SIG

Julia Siemer
Associate Professor of Geography,
Cartography and GIS
Department of Geography, University of Regina
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E-mail: Julia.Siemer@uregina.ca

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E-mail: pwozniak@NRCan.gc.ca

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Northwest Voyageur
E-mail: ankorsos@northwestvoyageur.com

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