



## president's report



### Dear Colleagues

Welcome to the new edition of ICA News. I hope that 2010 brings you peace and happiness and success in your ventures.

Before beginning my report I would like to sincerely thank

Newsletter Editor Igor Drecki for the wonderful job he did on the Special Edition of the newsletter, **50th Anniversary of ICA 2009**, which recorded the celebrations in Bern that marked the 50th anniversary of the Association. I am sure that all readers agree that this was a fitting publication to mark this significant milestone for the Association. It is the effort of individuals like Igor that makes ICA special – a community of enthusiastic contributors who are committed to support and grow the ICA for the

benefit of the international Cartography and GI Science community.

Immediately after the Bern celebrations the ICA Executive Committee travelled to Zürich for its meeting. The meeting was held over three days - June 11-13. The EC meeting was hosted by the Institut für Kartografie at ETH Zürich. We are most grateful for the support of ETH Zürich and Professor Lorenz Hurni, Head of the Institute (and Co-chair of the ICA Commission on Mountain Cartography) for providing the venue for the meeting and for the hospitality shown to the EC during our time in Zürich.

Following the EC meeting Secretary General and Treasurer David Fairbairn and I travelled to Rotterdam to represent the Association at the meeting of the Joint Board of Geospatial Information Societies. The meeting was held during GSDI Rotterdam on June 15. The conference (and the JBGIS meeting) was held at the World Trade Center in Rotterdam. > 02

## ica awards 2009

The International Cartographic Association has instituted a number of awards for outstanding service to the ICA and to cartography generally. These are:

- The **Carl Mannerfelt Gold Medal** - the highest award of the ICA. This award honours cartographers of outstanding merit who have made significant contributions of an original nature to the field of cartography. It is awarded only on rare occasions in order to emphasise its distinction.
- The **ICA Honorary Fellowship**. This award is for cartographers of international reputation who have made special contribution to the ICA. It includes a bronze medal.
- In addition, the **Diploma for Outstanding Services to ICA** is presented to individuals and organisations for their exemplary service to the ICA.

At the closing ceremony of the 24th International Cartographic Conference in Santiago, Chile the following awards were presented:

- The Carl Mannerfelt Gold Medal to **Professor Ferjan Ormeling** (The Netherlands)
- The ICA Honorary Fellowship to **Dr Bengt Rystedt** (Sweden)
- The Diploma for Outstanding Services to ICA to **Colonel Juan Vidal Garcia Huidobro** for his leadership of the Local Organizing Committee of ICC 2009

### Citation for Professor Ferjan Ormeling

The Carl Mannerfelt gold medal of ICA is awarded rarely, to cartographers of outstanding merit who have made significant contributions of an original nature to the field of cartography; it is awarded only on rare occasions in order to emphasise its distinction.

Professor Dr Ferjan Ormeling of the Netherlands matches this requirement, by his tireless efforts to promote and develop the discipline of cartography, alongside his excellent service to the International Cartographic Association.

The research and educational interests of Professor Ormeling have matched his commitment to ICA, and it is to these topics we must direct



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Stefan Räber (*right*) receiving an ICA special award for his contribution to the 50th Anniversary of the ICA celebrations held in Bern, June 2009 from Prof Lorenz Hurni at ETH Zurich, Switzerland |  
*Photography Corina Pachlatko*



As with all creative professions, cartographers need inspiration in their work. Whether it is a large project involving the development of the national map series, or implementation of spatial search functionality within a digital repository of maps, or design of a cycle map for a local community of urban cyclists, we need an inspired vision to address these challenges.

Our inspiration could come from variety of sources. This is certainly true in my case. A website containing scans of old maps provided stimulation to plan a major digitisation project of New Zealand governmental maps. A conversation with a fellow cartographer at the recent International Cartographic Conference in Santiago, Chile encouraged me to re-focus my research. These are just a couple of examples that motivated me to undertake the challenge, turn on my creativity, utilise my talents and push into action.

Inspiration rarely comes our way without our vigilance and our readiness to accept it. It is a gift which has to be utilised, otherwise it is wasted. Our inspiration needs to prompt us into action and drive us in our creative work. Only then are we fully embracing this gift, enriching it by our creations and giving it back to others for their use and enjoyment.

Being inspired is a wonderful experience which I am sure all of us are familiar with. But even more wonderful is to see others being inspired by us, our lecture, our map, or a cartographic project we are involved in. This is probably the ultimate measure of how well we responded to the gift, how well we were able to share and multiply our inspiration for others.

This edition of ICA News comes out with a two month delay. It was necessary to consolidate the reports from ICA Commissions and Working Groups as well as from several cartographic events including the ICC 2009. I hope that the material included in this record breaking 28-page newsletter justifies the wait. I am again very grateful for your wonderful contributions and support and am looking forward to continue working with you.

Igor Drecki | Editor ICA News | ICA ●

The **ica news** is published by the International Cartographic Association (ICA).

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Editor ICA News: **Igor Drecki** | The University of Auckland | New Zealand

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## president's report cont...

The meeting was chaired by Mark Cygan, the incoming Chair of JBGIS. Mark represents the International Map Trade Association (IMTA) on the Board.

My next commitment was to attend and present a paper at the The British Cartographic Society (BCS) Annual Symposium, held in Newport Pagnell, UK 17-20 June 2009. This was an ideal opportunity to meet again many familiar faces from the BCS and to make new friends. I had discussions with BCS President, Bob Lilley, during my time in Newport Pagnell. My paper was entitled *Interactive Integrated Media and Visualising Geography: Reflecting on Lessons Learnt*.

This meeting was followed with my attendance at the First Open Source GIS UK Conference, in Nottingham, UK, on June 22. The conference was jointly organised by the ICA Working Group on Open Source Geospatial Technologies, the Centre for Geospatial Science of the University of Nottingham, the Open Source Geospatial Foundation (UK Chapter), SOSoNET and Open Knowledge Foundation. The Chair of the ICA Working Group on Open Source Geospatial Technologies, Dr Suchith Anand of the University of Nottingham, is to be congratulated for offering this important conference. Secretary General and Treasurer David Fairbairn and Vice President Professor Georg Gartner also attended the conference. Professor Gartner presented a paper *Open GIS: State of Play for Cultural and Cartographic Heritage*. I gave a welcome on behalf of ICA and presented a paper *Visualising Alternative Futures using Open Source technologies*. As well, long-time ICA supporter Dr Barend Köbben (ITC, The Netherlands) attended the conference and presented a paper. The Second Open Source GIS UK conference will be held between 21-22 June 2010, again at the University of Nottingham ([www.opensourcegis.org.uk](http://www.opensourcegis.org.uk)).

I was invited by Diah Kirana Kresnawati to present a keynote paper at the South East Asian Survey conference (SEASC 2009), held in Bali, Indonesia, August 4-7. The meeting incorporated meetings of the Asian Federation of Land Surveying and Geomatics (AFLAG). The organiser of the conference was the National Coordinating Agency for Surveys and

Mapping of Indonesia (Bakosurtanal). It was held to mark the occasion of the 40th anniversary of Bakosurtanal. My paper was entitled *Everyday map use and personal map production with Web 2.0*. Also at the conference was ICA Commission on Education and Training member Mr Sukendra Martha, President of the Indonesian Association for Cartography, who is also from Bakosurtanal.

Former ICA Secretary General and Treasurer Professor Ferjan Ormeling too was at the conference, in his role as Vice Chairman of the UN Group of Experts on Geographical Names (UNGEGN) and Convenor of the UNGEGN Working Group for Training Courses in Toponymy. In conjunction with the main conference UNGEGN hosted the 16th UN Group of Experts on Geographical Names (UNGEGN) Asia South-East and Pacific South-West Divisional meeting on 4 August 2009. The theme of the meeting was *Geographical Names as Part of the Cultural Heritage in the Asia-Pacific Region*. UNGEGN also ran an International Symposium on Geographical Names on 5 August.

The 6th International Symposium on LBS & TeleCartography was held between 2-4 September 2009. It was organised by the Centre for Geospatial Science of the University of Nottingham and ICA Working Group on Open Source Geospatial Technologies. It was held at the University of Nottingham, UK. I had a paper in the Symposium programme. Professor George Gartner gave a keynote address and also presented a paper on my behalf *Considerations for using Google maps and imagery with mobile devices*.

On September 6-7 a small task force from the ICA Executive Committee, comprising Secretary General and Treasurer David Fairbairn, Vice President Professor Georg Gartner, Vice President Professor Menno-Jan Kraak and myself, met in London to advance documentation that was developed by the ICA Executive Committee to assist in advancing and growing the Association. The documentation developed at the London meetings was submitted to the Executive Committee meeting in Santiago, Chile in November 2009 for consideration and endorsement. Subsequently a synopsis of the documentation was provided

The ICA Executive Committee at their working meeting in Zurich, Switzerland | Photography Stefan Råber



# president's report cont...

to those present at a National Members meeting during ICC 2009 for comment. The EC is soliciting additional comments on the documentation from national members before further developing papers for review.

I attended the Society of Cartographers (SoC) (UK) 45th Annual Summer School in Southampton on 8 September 2009. The sessions in Southampton were both stimulating and interesting. I had time to talk to members of the SoC, Chair of the organisation Steve Chilton and its President Professor Danny Dorling.

In late September 2009 I attended and presented a keynote paper at the Deutsche Gesellschaft für Geographie (DGfG) conference in Vienna – Deutscher Geographentag 2009. The presentation was entitled *Moving from map and geospatial information provision with the Web to collaborative publishing using Web 2.0*.

I attended and presented two papers at the Australian Surveying and Spatial Sciences Institute conference, held in Adelaide between 30 September and 2 October. The first paper, as sole author was *Small Voices Magnified: Using Web 2.0 for Mapping Alternative Australian Viewpoints*. I co-presented a joint paper that addressed the work of the Sister Societies on JBGIS.

In October 2009 I attended three meetings in Bangkok, Thailand. On 25 October I was at the meeting of the International Steering Committee for Global Mapping meeting, Bangkok. In the evening of the same day I also attended a special meeting of the United Nations Statistics Division (UNSD), hosted by Mr Paul Cheung, Director of the UNSD. The main conference in Bangkok was the Eighteenth United Nations Regional Cartographic Conference for Asia and the Pacific, 26-29 October 2009. I represented the ICA at the Conference and made a presentation *Web 2.0, Map Production & Publishing and Geospatial Information Dissemination*.

In November 2009 the focus was on the ICC 2009 Conference in Santiago, Chile. As well as conference commitments, the Executive Committee met for two days immediately before the conference and for a day after the conclusion of the conference. Since its foundation on June 9, 1959 ICA conferences have been held around the world and November 2009 saw its conference held in South America for the first time. The ICA has held a previous conference in Latin America – the 13th International Cartographic Conference was held in Morelia, Mexico in 1987. After two decades the conference was again in Latin America. This was indeed a special occasion, being part of the celebrations for Chile's bi-centennial of 2010.

The ICA International Cartographic Conferences take place every two years and we met two years previously in Moscow. I again formally thank our colleagues from Russia for organising the 23rd ICC in Moscow in 2007.

At the opening ceremony we were honoured to have in attendance numerous officials from

Chile:

- A representative of the Minister of Defence, Francisco Vidal
- Commander in chief of the Chilean Army, General Óscar Izurrieta
- Commander of the Chilean Air Force, General Ricardo Ortega
- General Director of the Chilean Carabineros police force, Gordon Valcarcel
- Colonel Juan Vidal, Director of the Military Geographic Institute and President of the Local Organising Committee
- Representatives and personnel from the organizers of this event - the IGM, the conference organizers FISA, the Military School and the Army of Chile
- Representatives of sponsors of the conference - Autodesk, Intergraph, ERDAS, ESRI, Tracasa and the Government of Navarre
- Representatives of the Conference Patrons
- Representatives of the Government Ministries and of the Senate of Chile
- Representatives of Sister organizations – PAIGH (Secretary General Santiago Borrero), ISPRS (Second Vice President Professor Ammatzia Peled), IGU (President Professor Ronald Ablor), Professor Fraser Taylor, Chair International Steering Committee for Global Mapping and Mark Cygan, Chair of the JBGIS and also representing the IMTA.

At the conference it was most pleasing to have past ICA Executive members present. They were former Presidents Professor Fraser Taylor, Dr Bengt Rystedt and Professor Milan Konečný (Immediate Past President of ICA, a member of the current executive and Chair of the ICA Working Group on Cartography on Early Warning and Crisis Management). Also attending was former Secretary General and Treasurer Professor Ferjan Ormeling and former Vice Presidents Professor Judy Olsen, Professor Takashi Morita, Dr Li Li, Professor Elri Liebenberg, Dr Jaime Miranda i Canals and Professor Regina Almeida.

Awards were presented during the closing ceremony of the conference:

- The Carl Mannerfelt Gold Medal to Professor Ferjan Ormeling (this award honours cartographers of outstanding merit who have made significant contributions of an original nature to the field of cartography)
- The ICA Honorary Fellowship to Dr Bengt Rystedt (this award is for cartographers of international reputation who have made special contribution to the ICA)
- The ICA Diploma for outstanding services to ICA to Colonel Juan Vidal Garcia-Huidobro for his leadership of the Local Organizing Committee of ICC2009

An important ICA activity that takes place at all ICA conferences is the Barbara Petchenik Children's Map Competition, organized and managed by the ICA Commission on Cartography and Children. This is a map design competition for children ages 15 years and younger. It is held to honour the late Dr Barbara Bartz Petchenik, a past Vice President of the

ICA. The competition is held to coincide with the conference and the winning entries are available for viewing throughout the duration of the conference. This conference saw the launch of a second book of children's maps *Children Map the World*, Volume 2, published by ESRI Press and edited by Professor José Jesús Reyes Nuñez (Hungary), Professor Temenoujka Bandrova (Bulgaria), Professor Milan Konečný (Czech Republic), Immediate Past President of ICA and Jeet Atwal (Canada). The Commission on Cartography and Children and members of ESRI Press worked hard to have the book published in time for this conference. I was pleased that the book was available in Santiago.

The conference also included a map exhibition and technical exhibition. Both of these exhibitions provided conference attendees with first-hand knowledge about map publishing internationally, and advances in cartography and GIScience-related technology, equipment and services. Thank you to all who contributed and exhibited.

Throughout its 50-year history, ICA has brought together researchers, government mapping agencies, commercial cartographic publishers, software developers, educators, earth and environmental scientists, and those with a passion for maps. ICC 2009 provided a wonderful opportunity for the international cartographic and GI Science community to meet in Latin America.

I would like to formally thank the Local Organisers and their supporters for developing and hosting this wonderful event. Also thanks to the Army of Chile and the Military School who supported and hosted the conference, to supporters, exhibitors, contributors and friends of ICA who contributed to the conference and those that travelled to Santiago, Chile to join us at this wonderful event.

The 25th International Cartography Conference and the 15th General Assembly of the International Cartographic Association will be held 3–8 July 2011, Paris, France. See [www.icc2011.fr](http://www.icc2011.fr) for further information.

On November 27, 2009 I met with Associate Professor Abbas Rajabifard, President, GSDI and we discussed how both of our organisations might collaborate in the future.

Before closing, I would like to thank the ICA Web masters Felix Ortag and Manuela Schmidt for recent developments of the ICA Web site ([www.icaci.org](http://www.icaci.org)), which now includes the Map of the Month feature. The first product is the atlas, EARTH, published by Millennium House, Australia ([www.millenniumhouse.com.au](http://www.millenniumhouse.com.au)). The ICA is also grateful for the hosting of the ICA Web site by the Research Group Cartography, at TU Vienna, Austria.

Again, my best wishes for a successful 2010 for all who foster and contribute to the international Cartography and GI Science community.

William Cartwright | President | ICA ●



## President

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## Submission Deadlines

**15 May** for June editions

**15 November** for December editions

# ica awards 2009 cont...

our attention. His original contributions have addressed a range of cartographic enquiries and thought, starting with his early PhD work on the important topic of toponymy. Professor Ormeling has continued this work to the present day: he is the Vice Chair of the United Nations Group of Experts on Geographical Names, and has been convenor of its Working Group on Training Courses in Toponymy. In this capacity he has travelled the world on a volunteer basis, meeting, educating, and directing local cartographic practitioners and decision makers; and has organised courses in countries from Algeria to Indonesia.

His educational activities have included practical studies of cartographic education in fields such as animated mapping, but most importantly his jointly authored textbook (with Professor Kraak), *Cartography: Visualization of Spatial Data*, now in its third edition. He also co-chaired the ICA's Commission on Education and Training for 12 years, and presented many workshops and publications on education.

His educational interests have supported strong research work also in the field of historical cartography; his specialisation in East Indies mapping has resulted in a number of extremely impressive large-format, academically-informed graphic works, but he has also studied the historical development of atlases closer to home - primarily his old school friend the famous Bos Atlas, used by every Dutch schoolchild. Again, the ICA Commission on the History of Cartography has benefited from his sound support, particularly in the form of educational workshops.

Professor Ormeling has extended his incisive approach to cartographic thinking to newly emerging fields such as geovisualisation, data quality, media mapping, and environmental and planning mapping.

It is in the field of atlas cartography that Professor Ormeling has achieved greatest distinction. Having started his career at Wolters as assistant atlas editor (1961-1968), he was one of the editors of the Netherlands National Atlases and his theoretical contributions on atlas structure and atlas concepts are still highly regarded.

This extensive academic and research career has led to the publication of approximately 450 items with his name as author. Such a volume and quality of work, coupled with his support for ICA as Commission chair, national representative and Secretary General for 8 years, makes Ferjan Ormeling a worthy recipient of our highest honour, the Carl Mannerfelt gold medal.



## Citation for Dr Bengt Rystedt

The ICA Fellowship is a distinguished award recognising the contribution of the recipient to the work of the International Cartographic Association. For Bengt Rystedt, ICA has been a focus of an extraordinary range of activities which have brought excellence to the organisation.

Whilst showing exceptional attention to detail, Dr Rystedt has always considered the long term health and welfare of the Association. His long term commitment to equity, notably in dealing with ICA's outreach to less developed nations, is evident in his strong interest in African issues and his willingness to engage with organisations and individuals in Africa in order to improve capacity building in that important continent. Much of this work has been done whilst playing a leading role in the Joint Board

of Geospatial Information Societies, as an effective spokesperson for ICA and for the initiatives which have been proposed by the international geospatial community.

This practical approach has been matched by a true desire to develop the scientific basis of our organisation. Dr Rystedt initiated the Research Agenda, and has been very much in favour of extending it to include the areas of Geographic Information Science which are central to the initiation and use of cartographic data and products.

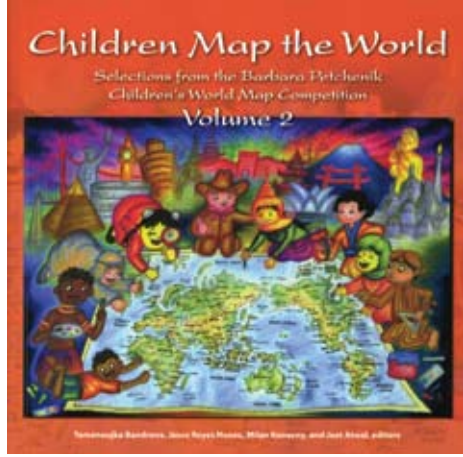
His long term commitment to ICA is shown by service as Chair of the National and Regional Atlas Commission from 1985, service with the organising committee for the 1997 International Cartographic Conference in Sweden, and membership of the Executive Committee for many years, culminating in his election as President in 1999. In all his work for ICA, Dr Rystedt has shown a great sense of responsibility, emphasising work and content but never his personal ambition. In his quiet and effective manner he was able to solve problems, and like the proud Swede he is, his diplomatic approach was always highly visible. He has been able to work always for the benefit of ICA over decades of loyal service.

For the dignified and outstanding way in which he has contributed for many years to the success of the ICA, the Association is pleased to award its Honorary Fellowship to Dr Bengt Rystedt.

Professor Ferjan Ormeling became the 12th recipient of the prestigious ICA Carl Mannerfelt Gold Medal and Dr Bengt Rystedt received the 49th Honorary Fellowship of the ICA. Warm congratulations go to both awardees for their wonderful achievement from the ICA Executive Committee and the entire ICA community.

**David Fairbairn** | Secretary General & Treasurer | ICA ●

# ica news children map the world



The International Cartographic Association (ICA) is the only international and professional association that regularly organizes a map drawing competition for children. The number of nations and participants in the competition has steadily increased from 1993 to 2007. Now other nations which at present are not ICA members are asking to participate in the competition. International interest is growing because of the educational aspect of the competition.

The main goal of the Barbara Petchenik Children's Map Competition is to promote children's creative representation of the world in graphic form. Participants, children less than 16 years of age, are encouraged to draw a world map on a general theme which is changed, generally every four years. The themes have included: *Save Our Environment*, *Many Nations-One World*, and *Living in a Globalized World*. There are two levels to the competition. The first level is the national level where country organizers select six (previously five) maps to represent their country at the second level - the international competition.

The Barbara Petchenik Children's Map Award was created by the Executive of the ICA in 1993 as a memorial to Barbara Petchenik, the first woman elected as an ICA Vice-president. Barbara Petchenik's early research related to children and much of her work as a cartographer was dedicated to creating maps for children. It was the idea of Dr Fraser Taylor, then president of the ICA. The first competition was held in 1993 in Köln and then subsequently with each biennial ICA conference. The international winners, one in each of the three age categories, under 9 years, 9 to 12 years, and 13 to 15 years, together with a public award (based upon the votes of conference delegates), each receive a certificate and monetary prize.

Since the ICA competition's inception, through the national competition, thousands of children in many countries have been involved in mapping. The first volume of *Children Map the World, Selections from the Barbara Petchenik Children's Map Competition* (2005, ESRI) contains a selection of the national maps from the first decade of the competition.

The idea for a second volume of the book was born in 2008 at the annual ESRI-users conference where discussions between current ICA President Professor William Cartwright and former President Professor Milan Konečný and ESRI editors were initiated. Volume 2 contains 100 maps submitted as national finalists on the theme of *Many Nations-One World*, for the 2005 (A Coruña, Spain) and 2007 (Moscow, Russia) international competitions. The maps which represent a great diversity in content and interpretation, and techniques of production, come from all over the world including drawings from Argentina, Brazil, Bulgaria, Canada, China, Croatia, Czech Republic, Finland, Germany, Hungary, India, Indonesia, Iran, Israel, Japan, Lithuania, Malaysia, New Zealand, Norway, Oman, Philippines, Poland, Qatar, Romania, Russia, Saudi Arabia, Slovakia, South Africa, Spain, Sri Lanka, Sweden, The Netherlands, Turkey, Ukraine, United Arab Emirates, United Kingdom and the United States.

In addition to promoting aspects of mapping, the competition also provides children with an opportunity to think about their national identity and its place within the world community. *Many Nations-One World* is a theme that helps children to be more knowledgeable of children from different countries, ethnic groups or minorities, with different religions. This tolerance and positive understanding can be seen when we examine their drawings. Support for this can be found in the diversity of map titles, located at Carleton University, Canada ([children.library.carleton.ca/index.htm](http://children.library.carleton.ca/index.htm)), for example:

- *We Have Different Colours of Skin, But We Are All Children*
- *All Together For a Common World*
- *The World Peace in Children's Eyes*
- *A Map of the World in Colours for Dancing*
- *Friends All Over The World*
- *We Are a Lot of Different Nations But All Together*
- *You Never are Alone!*
- *Let's Make Our World Merrier With Smiles of United Nations*
- *Together We Will Create A Better World*
- *Many Cows, One Milk*
- *Building a Nation of Love, Peace and Unity*
- *Happy Together, the Global Family*

For the Barbara Petchenik Children's Map Competition, organized for the 24th International Cartographic Conference in Santiago, Chile (November 2009), a new theme was selected *Living in a Globalized World* and changes to the evaluation system inaugurated. In the future it is hoped that through involvement of more nations in the ICA competition, a greater number of children (and adults) will be exposed to the value of maps, mapping and the fun and joy of working with maps.

Jacqueline Anderson and Temenoujka Bandrova | ICA Commission on Cartography and Children | Canada / Bulgaria ●

# ica news 25 years ago...

Presented here is a new feature of the ICA News. It aims at providing a historical account of a story or a news item published in the ICA newsletter 25 years ago...

The first item talks about the ICA Newsletter itself, providing a fitting start to this new feature. We hope you will enjoy it!

Igor Drecki | Editor ICA News | ICA ●

## ICA Newsletter, No 4, November 1984

### ICA Report 1980-1984

[...]

#### ICA Newsletter

A highlight was undoubtedly the start of the ICA Newsletter. The idea of such a publication was conceived at the 6th General Assembly in Tokyo, 1980. It was generally felt that the irregularly appearing IGU Bulletin in which ICA news has been published since 1964 did not fulfil its purpose as an adequate cartographic news medium. Consequently, a separate newsletter was recommended. Due to various circumstances, however, realization of this project was delayed. Thanks to the initiative of B V Gutsell (the Canadian member of the ICA Publications Committee and Editor of *Cartographica*) supported by R W Anson (PC chairman) and with the support of the University of Toronto Press, obstacles were removed and the first issue of the Newsletter was published in Spring 1983.

The ICA Newsletter is issued twice a year and, for reasons of economy, is published in English only. Single copies are sent to member countries, chairmen of Committees and Commissions, sister organizations (FIG, ISPRS, IGU etc.) and to editors of cartographic journals and newsletters. Each recipient is requested to promote further distribution and make photocopies available to interested agencies, institutes and individuals. The newsletter has met with a very positive response and its relevance is generally realized and appreciated. It is hoped that the publication will lead to better understanding and to improved cooperation between cartographers and practitioners in associated disciplines. It is significant that various national newsletters have reproduced the ICA Newsletter in full; some countries have decided to appoint correspondents.

F.J. Ormeling [Sr.] / President ICA  
(Edited version of the original presentation at Perth, August 1984)





## diah kresnawati



A map to me is just like my purse; wherever I go I have to have it with me. Although I sometimes do not have it physically in my hand, I always think spatially: what is my direction? where is my position?

I have always liked to read and make maps since I was at school. I have studied geography at the Gadjah Mada University in Yogyakarta, a subject that my parents didn't approve initially but eventually became enthusiastic, especially after reading some of my interesting textbooks. I graduated in 1982 as a cartographer. For my university project I made over ten thematic maps, coloring them manually with color pencils. I enjoyed doing it, and since then I've really liked to use a map as a way of familiarising myself with new places. I also became a map collector. For me, maps or map mentality is very important because I get used to thinking using spatial dimensions. These days I am more a map user than a cartographer that enjoys reading colourful maps and their varied designs, even though sometimes they ignore cartographic design principles.

Currently I am working for the National Coordinating Agency for Surveys and Mapping of Indonesia (BAKOSURTANAL) as the Head of Center for Services and Information. I like my job, which challenges me to attract people to use maps as the base of their activities including decision-making. One of our programmes is a kind of a workshop for local government officers, teachers, journalists and children on *how to explore a map*. We also have a programme for children called *Map Adventure for Kids*. Many children actually signed up to the programme and enjoyed participating in this orienteering game. I hope that through such promotional programmes, more people in the future will be using maps in their daily life and recognising the benefits of cartography and mapping in all aspects of their activities.

Last but not least, I wish I can make cartography more easily understood and used. Maybe I will write a book about how people use maps for any kind of purposes.

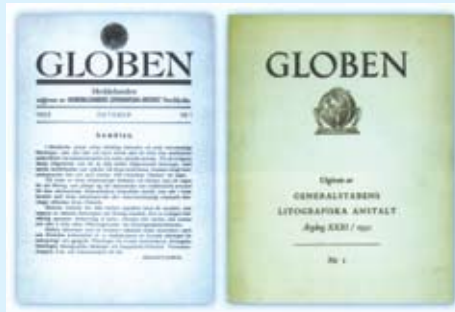
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The upper part of the *North Sumatera* map (2009) produced by the National Coordination Agency for Survey and Mapping (BAKOSURTANAL); a supplement to the North Sumatra book within the Indonesian Geographical Expedition series.

[www.kartografiska.se](http://www.kartografiska.se)

*Kart & Bildteknik* (Mapping and Image Science) is the official journal of the Swedish Cartographic Society (Kartografiska Sällskapet - KS).

Since 1922 the Generalstabens litografiska anstalt (The General Staffs Lithographic Institute) had published a journal called *Globen* which was one of the oldest journals of its kind with significant cartographic content. The journal also featured some announcements from the Swedish Cartographic Society. It was published until 1978.



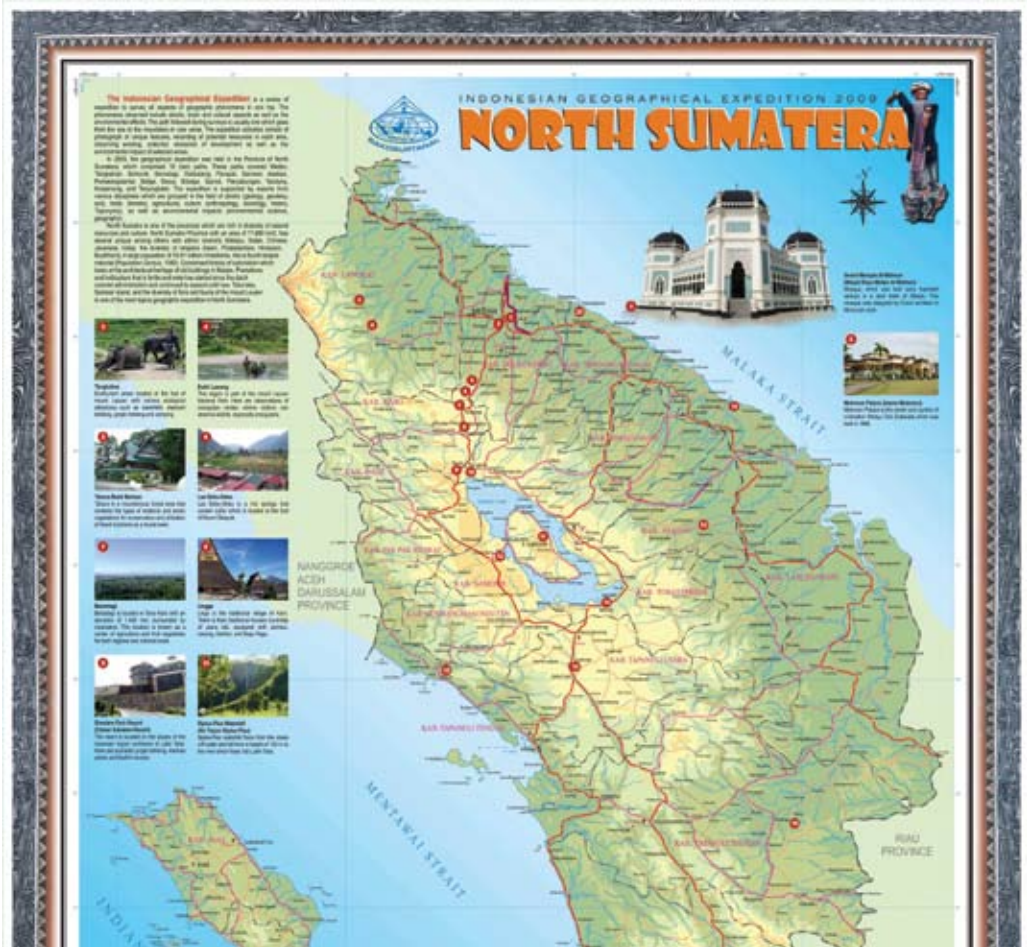
The first issue of the *Globen* journal from 1922 (left) and a 1952 edition cover

The Swedish Cartographic Society's official journal was first published in 1985 under the name *Kartbladet*. The initial format was A5, which in 1999 was changed to 170 x 240mm. In 2003, when the Society merged with the Swedish Society for Photogrammetry and

Remote Sensing, the journal was renamed to the current name of *Kart & Bildteknik*. At the same time, its format changed to 205 x 275mm. The journal is published four times a year and about 3,200 copies are printed and distributed to all members.

**Peter Wasström** | President | Swedish Cartographic Society | Sweden

Recent cover of the *Kart & Bildteknik* journal





# profiles japan cartographers association

[www.jmc.or.jp/gakkai/index\\_e.html](http://www.jmc.or.jp/gakkai/index_e.html)

The oldest existing map in Japan dates back to the 8th century and depicts newly developed parcels of Todaiji Temple property drawn on a linen cloth. Since then, Japan has produced nearly every kind of map imaginable using a variety of techniques, and nowadays is taking advantage of the latest and seemingly ubiquitous digital technology.

With the goal of contributing to the development of cartography internationally, the Japan Cartographers Association (JCA) was estab-

Digital Map Fair 2009 organized by the Japan Map Center at the Tokyo International Forum | *Photography courtesy of Takashi Morita*



lished in 1962, after sending a delegate to observe the first general assembly of the International Cartographic Association (ICA) held in Paris in 1961. JCA is the only Japanese scientific cartographic association and includes nearly eight hundred members from a wide range of areas, including universities, schools, national mapping agencies, surveying and mapping companies, publishing companies, software houses, planning and design offices, and consulting firms. JCA has an annual meeting every summer, a regional meeting, and publishes a quarterly journal Chizu (MAP).

JCA is one of the cooperative academic societies of the Science Council of Japan (SCJ), a governmental organization that directs Japanese academic research. The National Committee for Cartography (NCC) under the chairmanship of Professor Takashi Morita, comprises six members, four of whom are members of JCA. The NCC operates within SCJ and represents Japan in the ICA. It sends official delegates to the General Assemblies of the ICA and to the International Cartographic Conferences (ICC). The Science Council invited ICC to Tokyo in 1980 and has commissioned four meetings since then, in 1986, 1989, 1996 and 2004. To date, three Japanese



An exhibition of large old maps at the 2008 regional meeting held in Uwajima-Shikoku, southern Japan | *Photography courtesy of Takashi Morita*

cartographers served in the Executive Committee of the ICA as Vice Presidents (S. Nomura, T. Kanakubo and T. Morita) and three as the ICA Commission chairs (Y. Masai, T. Kanakubo and T. Morita). Three ICA Honorary Fellowships were awarded to Japanese cartographers: Akira Watanabe (1980), Tositomo Kanakubo (1999) and Kei Kanazawa (2001).

**Takashi Morita** | Chairman | National Committee for Cartography | Scientific Council of Japan | Japan ●

## ica news new features of ica website

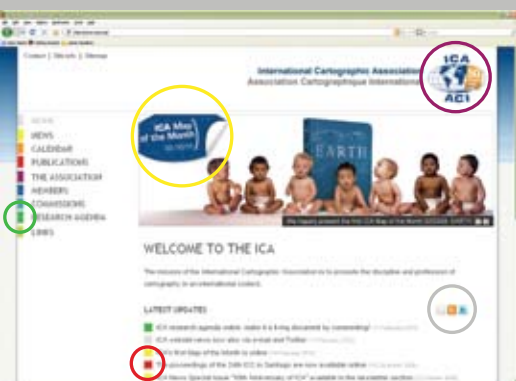
[www.icaci.org](http://www.icaci.org)

Over the last couple of months we have been working on the ICA website introducing new content and useful improvements.

### Research Agenda ○

We have introduced a new menu item **Research Agenda**, which contains a basic document for the research work in the Commissions and Working Groups of the ICA. Please note that this section allows adding comments and receiving updates. We are looking forward to an active discussion on the ICA research topics!

The ICA website's Home page | *Image Igor Drecki*



### Map of the Month ○

Following from David Fairbairn's announcement in the ICA News No 52 (p 3), we have now added a new and colorful **Map of the Month** feature within the **News** (formerly Newsletter) section. The intention is to display high quality cartography and promote map makers and cartographers by showcasing their talents, creativity and professionalism. The maps and cartographic products that feature in this section are award winning entries from the International Cartographic Exhibition run in conjunction with the biennial ICA Conferences. They provide a benchmark in cartographic excellence. The feature enhances further the important role of the ICA website in disseminating cartographic activities worldwide and provides reliable and authoritative state-of-the-art in the conceptual and applied development of our discipline. Within the next few months, we will feature other winning entries from the ICC 2009 map exhibition in Santiago, Chile.

### ICC 2009 Proceedings ○

Visiting the **Publications** section of the ICA website will lead to online Proceedings from the International Cartographic Conferences. The

latest proceedings from the 24th ICC Santiago 2009 are now available for download.

### ICA 50 Years Logo ○

**The Association** section of the website offers digital versions of the ICA logo. The **ICA 50 Years** anniversary logo can be used up to the end of May 2010 concluding the anniversary period. **We kindly ask you to use only the original ICA logo files from the ICA website.**

### Email and Twitter Feeds ○

Apart from the RSS feed, we have now added two other methods of subscribing to news and updates on the ICA website. Now, you can get the latest news via **Email** or by following the ICA **Twitter**-stream ([www.twitter.com/icawebsite](http://www.twitter.com/icawebsite)).

For questions and ideas concerning the ICA website, please contact Manuela Schmidt or Felix Ortig at [icawebsite@cartography.tuwien.ac.at](mailto:icawebsite@cartography.tuwien.ac.at).

**Manuela Schmidt** | Web Developer | ICA Website | ICA | [icawebsite@cartography.tuwien.ac.at](mailto:icawebsite@cartography.tuwien.ac.at) ●

## Cartography and Children

[lazarus.elte.hu/ccc/ccc.htm](http://lazarus.elte.hu/ccc/ccc.htm)

### Meeting in Santiago, Chile

The ICA Commission on Cartography and Children (CCC) met in Santiago on 18 November 2009 during the 24th International Cartographic Conference. The meeting was divided into two parts:

- Commission activities between 2007-2009 including future plans for the next two years
- discussion of experiences associated with the organization of the latest Barbara Petchenik Competition and the judging of the entries based on the new rules adopted last year

The meeting started with commemorating the 10th anniversary of the foundation of the CCC. In 1995 the Working Group on Cartography and Children began its activities, which constituted a solid starting and reference point for the future Commission that was eventually formed at the ICC 1999 in Ottawa, Canada. We were honoured to have in attendance Jacqueline Anderson (Canada) and Regina Araujo de Almeida (Brazil). Jaqueline played a fundamental role in first establishing the Working Group and later the Commission, and chairing the CCC between 1995-2003. Regina, past Vice President of the ICA, also helped in the organization of the CCC in its early days. We also remembered our colleagues Henry Castner, who worked together with Jacqueline on the establishing of the CCC, and Patrick Wiegand, founding member and Commission Chair between 2003-2007.

During 2007-2009 the Commission organized two meetings; the first in Borovets (Bulgaria) in January 2008 and the second in Prague (Czech Republic) a year later.

From 2007 the distribution of the Commission newsletter by email has become more

systematic, with at least two newsletters a year (February and September). We plan to keep this frequency in the next two years.

In September 2008 the Commission was asked by the ICA Executive Committee (EC) to begin work on the 2nd volume of the *Children Map the World* book in collaboration with ESRI. A team of four Commission members was formed, which kept in touch with the editors at ESRI. By mid 2009 a selection of 100 drawings from the 2005 and 2007 Barbara Petchenik Competitions was made. The book was officially launched by the ICA President William Cartwright at the ICC 2009 in Chile.

One of the Commission aims for 2007-2011 is the promotion of the use of digital cartography and GIS in schools. Members are encouraged to organize or participate in the GIS Days held in more than 80 countries every year in November.

Other tasks for 2010-2011 include:

- update of the membership list on the Commission website
- compilation of an online bibliography and web links on cartography and children as a resource for all Commission members and specialists in this area
- organization of a new competition, planned for ICC2011 in Paris, France, i.e. the Biennial Awards on Educational Cartographic Resources, an initiative started by our Patrick Wiegand in 2005 (a detailed preliminary proposal was written and sent to the ICA EC for consideration)

In our original plan of activities a new book on Educational Cartography, including a collection of case study papers under this theme, was included. However, due to the *Children Map the World* book commitments, it was decided to postpone this project until the first half of 2010, with specific proposals due for the next Commission meeting.

The second part of the meeting was exclusively dedicated to the Barbara Petchenik

Competition, especially the organizational aspects and possible changes to the new rules of the competition. The members stressed the importance of providing support to the ICA EC with regards to the rules and judging of the competition. Some of the issues discussed during the meeting included:

- the aspect of reproduction and dissemination of the winning entries
- possible changes to the age groups
- the physical requirements of the entries
- current and future themes for the competition
- experiences of the Judging Committee with regards to evaluation of entries and decision-making according to the new competition rules
- a template of the voting slip for future competitions

Detailed opinions and proposals expressed by the participants can be downloaded from the Commission website [lazarus.elte.hu/ccc/ccc.htm](http://lazarus.elte.hu/ccc/ccc.htm).

Finally, meeting participants expressed their appreciation to our colleague Marcela Riveros (Chile) for her efforts in organizing the Barbara Petchenik Exhibition during ICC 2009, and for her original and laudable initiative of creating a wonderful catalogue presenting all the entries submitted to the Exhibition in printed format.

### Future Plans

The next Commission meeting will be held during the 3rd International Conference on Cartography and GIS, 15-20 June 2010 in Nessebar, Bulgaria.

José Jesús Reyes Nunez | Co-Chair | ICA  
Commission on Cartography and Children | Hungary ●

## Digital Technologies in Cartographic Heritage

[web.auth.gr/xeee/ICA-Heritage/](http://web.auth.gr/xeee/ICA-Heritage/)

### Workshop in Vienna, Austria

The ICA Commission on Digital Technologies in Cartographic Heritage and the Vienna University of Technology host the 5th International Workshop on Digital Approaches in Cartographic Heritage in Vienna, Austria, 22-24 February 2010.

The Workshop is addressed to scholars, researchers, map curators, map collectors, administrators, digital industry / market operators, and students coming from different cultural and educational backgrounds (humanistic, scientific and engineering) whose work is either focused on or affined to cartographic heritage.

The Workshop offers a common ground to colleagues from various disciplines and practice where they can meet, interact and exchange knowledge, experience, plans and ideas on

Participants of the ICA Commission on Cartography and Children meeting in Santiago





how the digital revolution, modern information and communication technologies in general can or could be used to contribute to cartographic heritage in terms of acquisition, processing, visualization and communication of relevant digital data.

Aside from the scientific presentations in the technical sessions, some excursions are also arranged for Workshop participants:

- spherical displays as globe library, University of Vienna
- the Globe Museum of the Austrian National Library
- city representations in historical maps, views and models, Wien Museum
- history of the Austrian National Library, tour through the State Hall
- Cimelia of the Cartographic Collections in the Municipal and Provincial Archives of Vienna
- Heritage of Cartography and Geoinformation in Austria, Austrian Federal Office for Metrology and Surveying (BEV)

More information about the workshop can be found at the workshop's official website: [cartography.tuwien.ac.at/cartoheritage/](http://cartography.tuwien.ac.at/cartoheritage/).

**Evangelos Livieratos** | Chair | ICA Commission on Digital Technologies in Cartographic Heritage | Greece ●

## Education and Training

[lazarus.elte.hu/cet/](http://lazarus.elte.hu/cet/)

### Meeting in Santiago, Chile

The Commission on Education and Training (CET) held a face-to-face meeting during the ICC2009 conference in Chile. We were pleased to have Dr David Fairbairn, Secretary General of the ICA in attendance. The CET met to reflect in the activities on 2009 and to discuss proposed activities for 2010. The discussion was lively and valuable input was provided to future directions for the commission. More than ten papers on cartographic education were presented at the ICC 2009 conference.

The CET has been asked by Professor Menno-Jan Kraak to contribute to the establishment of the ICA Research Agenda. The agenda has recently been published in the affiliate English language journals (*Cartographic Journal*, *Cartographica* and *CaGIS*). In response the CET has introduced an Academic Papers page on its website (see below), a research paper was presented at the ICC2009 conference and a journal article on "the past development and future directions of cartographic education" is under preparation for publication in 2010. The Research Agenda will be supported by other activities in the future as it is seen as an important component of the CET.

Prior to the meeting in Santiago, the Chair of the CET also contributed to the web mapping workshop run by the Commission on Maps and

the Internet by giving a presentation on *The Changing Face of Cartography – Internet Mapping Challenges*. The workshop was held at the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA – Servicio Hidrográfico y Oceanográfico de la Armada de Chile) in Valparaíso on 14 November. The commission attempts to enhance cartographic education related to the Internet.

The CET Newsletters have been produced for each month of 2009 from April on. They can be viewed at the CET website. The website is regularly maintained by Professor László Zentai so that it remains up-to-date and relevant to members and the International community of cartographers. Many thanks go to Prof Zentai.

### Current Projects Report

#### • The Generic Attributes of Cartography Graduates

The CET discussed the merit of developing a generic attributes list for cartography graduates. The initial set is presented below. Cartography courses are designed to provide the community with scientist who have:

- the ability to apply knowledge of basic cartographic fundamentals
- the ability to communicate effectively, not only with other professionals, but also with the community at large
- in-depth technical competence in at least one cartography sub-discipline
- the ability to undertake cartographic problem identification, formulation and solution
- the ability to function effectively as an individual and in multi-disciplinary and multicultural teams, with the capacity to be a leader or manager as well as an effective team member
- an understanding of the principles of cartographic design and development
- an understanding of professional and ethical responsibilities and commitment to them
- an expectation of the need to undertake lifelong learning, and the ability to do so

#### • Iran - Cartography Refresher Course

Thirty participants attended the three week hands-on Workshop on Cartography in Tehran, Iran. The workshop, held from 9th to 13th May 2009, was organised by the National Cartographic Center of Iran and the ICA Commission on Education and Training. The workshop was hosted by the National Cartographic Center (NCC), and in particular staff of the Cartography Department, NCC ICA delegate Mr Babak Shamei, and the deputy manager of the Cartography Department, Mr Mehrdad Jafari. Participants were primarily NCC staff involved in map production associated with the publishing of country maps, city maps, street directories and atlases. The workshop was presented by David Fraser and Colin Arrowsmith from



Participants of the ICA Commission on Education and Training meeting in Santiago, Chile

Australia, László Zentai and Antal Guszlev from Hungary and David Forrest and Mike Shand from Great Britain.

#### • Vietnam - Cartography Workshop

It is proposed to run a workshop on cartographic theory and practice in Ho Chi Minh City at some time during 2010, possibly August. It may be that this will about a walking tour of selected scenic forest areas in Vietnam. This is at the early stages of development but if you are interested in being part of this workshop please let me know.

### Future Plans

The ICA Commission on Education and Training plans to use the cartography workshop held in Tehran as a model for future workshops. Initial communication is being undertaken with cartographic colleagues from member countries in the hope that the workshop model can be adapted and adopted to benefit cartographers in 2010.

To this end a call has been sent out to collect expression-of-interest responses from CET members and others. Guidelines have been produced for the workshops. They can be found at the CET website. Two countries have expressed an interest in having a workshop on cartography run in their country. The Vietnam Academy of Science and Technology has confirmed its support for a workshop in 2010.

**David Fraser** | Chair | ICA Commission on Education and Training | Australia ●

## Generalisation and Multiple Representation

[ica.ign.fr](http://ica.ign.fr)

### Workshop in Dagstuhl, Germany

In April 2009 a five day Workshop *Generalization of spatial information* was held in Dagstuhl, Germany, that explored and deepened our understanding of research questions surrounding the automated representation of geographic information at multiple scales. The

> 10

workshop was jointly organised by Sébastien Mustière (Institut Géographique National - Saint-Mandé, France), Monika Sester (Leibniz Universität Hannover, Germany), Frank van Harmelen (VU University Amsterdam) and Peter van Oosterom (TU Delft), both from The Netherlands. It brought together practitioners, and researchers from around the world.

Perhaps the best workshops are akin to experiments using super colliders – you smash different disciplines together and delve into the ideas that spin out from those collisions! Work on the representation of geographies at multiple levels of details (map generalisation) has always been a multi-disciplinary pursuit. To that end the workshop brought together the usual suspects – data modellers, cartographers, GIS vendors, representatives from National Mapping Agencies, and researchers in computational geometry. The Workshop presentations included discussion of topics such as cartographic and model generalisation, as well as ideas on using client/server models to handle ‘on demand generalisation’ and to support web services. But intriguingly this workshop also brought to this mix, those working on ontological modelling and the Semantic Web.

The history of research in map generalisation has, quite naturally, grown from an interest in making digital ‘all things traditionally cartographic’, most particularly series mapping, at a range of scales (from 1:10 000, 1:50 000 through to the smaller scales, 1:250 000, 1:1 000 000). National Mapping Agencies have been a big customer of the fruits of this research but as Tim Berners-Lee (father of the web) predicted, the web continues to have a profound effect on how we create, share, and utilise information, and this applies in equal measure to the representation of geographic information. The change wrought upon society by the web lies at the centre of the idea of web 2.0. For those involved in mapping, the Internet has created a set of moving goalposts in terms of the objectives of map generalisation, both in how we source data, and in how we use and interact with it. The user expects the instant, thematic map, perhaps as a mashup, drawing upon multiple, multi scale data sources, sourced from who-knows-where, and of course, free.

Who are the users of such maps in these shifting sands of technology, and what are their requirements? Can we anticipate their map requirements, and how do ‘translate’ those needs into a finished map (in the way that perhaps a traditional cartographer might have done)? What do we have to do to our data to make it more sharable, and how do we facilitate the integration and effective abstraction of geographic information in a way that supports high levels of automation (in a context where users know what they want, but don’t know how to get it)?

The workshop had as its premise the idea that map generalisation is a decision making process; that there exists a complex set of dependencies between the data and the map task that govern a set of cartographic operations – a set of operations that classify, and then visually and unambiguously portray that information. The importance of having data that are richly described, to support this decision making process, has long been understood. This workshop explored ways in which ontological modelling can be used to describe and make explicit, the concepts and linkages that naturally exist between geographic phenomena as a way of facilitating integration and automated mapping. The workshop also examined ways in which geographic information can become part of the semantic web – the semantic web being a place in which the semantics of information and services are defined such that it is possible for the web to understand and satisfy the requests of people and machines to use web content (which opens up the intriguing idea of maps by machines, and maps for machines). Exploring these research veins enables the community to think very differently about how we can integrate data at different resolutions, and to conceive of maps in forms far removed from conventional maps – in the form of high dimensional and thematic maps. These ideas led to thoughts on how we might reason about geographic space – and using reasoning both as part of the database enrichment process, as well as a cross over between the user’s task, and a map specification that can drive the map generalisation process. For details of the papers and breakout sessions please visit: [www.dagstuhl.de/en/program/calendar/semhp/?semnr=09161](http://www.dagstuhl.de/en/program/calendar/semhp/?semnr=09161).

## Future Plans

The ICA Commission on Generalisation and Multiple Representation welcomes contributions to its next Workshop *Geographic Information on Demand*, to be held in Zurich, immediately prior to the GIScience conference, 13-14 September 2010.

Participants of the ICA Commission on Geospatial Analysis and Modeling Workshop in Gävle, Sweden | *Photography courtesy Bin Jiang*



The Workshop is comprised of presentations, open problems and round table discussions. Attendance is dependent on submission of a 2000 word position paper by 15 April 2010.

We are particularly interested in current research that explores: the context of map use and how this can be linked to map generalisation; methods by which users can easily specify map requirements; ways of evaluating map output as part of more fully automated solutions; the sharing of algorithms through web services, exploring the idea of machine to machine maps; the role of generalisation in supporting third party data integration; the use of generalisation in low and high dimensional data. For any of these topics, the Commission welcomes demonstrations that illustrate the utility of systems (experimental or commercial).

For more details explaining these topics, and on submission, visit [ica.ign.fr](http://ica.ign.fr).

**William Mackness and Sébastien Mustière**  
| Co-Chairs | ICA Commission on Generalisation and Multiple Representations | UK / France ●

## Geospatial Analysis and Modeling

[www.fromto.itb.hig.se/~bjg/ica/](http://www.fromto.itb.hig.se/~bjg/ica/)

### Workshop in Gävle, Sweden

The 3rd ICA Workshop on Geospatial Analysis and Modeling was successfully held in Gävle, Sweden, 6-7 August 2009, attracting over 70 participants from all over the world with 24 presentations and two invited keynote presentations. More details can be found at [fromto.hig.se/~bjg/ica/workshop2009/](http://fromto.hig.se/~bjg/ica/workshop2009/).

### Publications

A theme issue on *Geospatial Modeling of Urban Environments*, guest edited by Xiaobai Yao and Bin Jiang, developed from the 2nd ICA Workshop on Geospatial Analysis and Modeling, 12-13 July 2007, Athens, GA, USA, has just been published in the journal *Environment*



and *Planning B: Planning and Design*, 36(5).

The long awaited book entitled *Geospatial Analysis and Modeling of Urban Structure and Dynamics*, Springer: Berlin, will come out in February 2010.

**Bin Jiang** | Chair | ICA Commission on Geospatial Analysis and Modeling | Sweden ●

## Geospatial Data Standards

[ncl.sbs.ohio-state.edu/ica/](http://ncl.sbs.ohio-state.edu/ica/)

### Meetings in Santiago, Chile

The ICA Commission on Geospatial Data Standards held its annual meeting on 13 and 14 November 2009 at the Universidad Tecnológica Metropolitana (UTEM), in Santiago, Chile, preceding the ICC 2009. We were hosted by Prof Enrique Pérez of UTEM, and we would like to thank him very much for the arrangements. We would also like to thank Pablo Dueñas Rivera of Servicio Aerofotométrico de la Fuerza Aérea de Chile (SAF) for providing Spanish-English translations for the seminar and our Commission meeting.

Our Commission meeting began with a morning seminar on standards and spatial data infrastructures (SDIs), for the cartography students and staff at UTEM. Presentations were made by Commission members Dominique Laurent, Joselyn Robledo, Giannina Reyes and Antony Cooper. We also had a presentation by Cristian Aqueveque, the Executive Secretary of Sistema Nacional de Coordinación de Información Territorial (SNIT), the Chilean SDI.

The focus of this Commission meeting was on identifying the research that the Commission could conduct in the future. From a long list of possible research topics, we identified the following as being priorities:

- exchanging experiences of using standards in SDIs
- comparing how standards are used in SDIs
- researching how to implement various data quality measures
- evaluating different standards for quality and how to combine them
- revise and expand our original models of SDIs developed from the Enterprise and Information Viewpoints of the Reference Model for Open Distributed Processing (RM ODP).

The Commission also held an open business meeting during the ICC itself in Santiago on 19 November 2009. Presentations there were made by Iván Lienlaf, Joselyn Robledo, Giannina Reyes, Tatiana Delgado and Antony Cooper.

The Commission holds mini-meetings during the year, when some members of the Commission happen to be together at other meetings.



The ICA Commission on Geospatial Data Standards meeting in Santiago, Chile | *Photography courtesy Antony Cooper*

We find these useful to maintain momentum in our work and collegiality. Since our last report in ICA News, three mini-meetings were held, attached to the Plenaries of ISO/TC 211, Geographic information/Geomatics, in Molde, Norway (28 May 2009) and Québec, Canada (4 November 2009), and attached to the Global Spatial Data Infrastructure Conference (GSDI-11) in Rotterdam, The Netherlands (17 June 2009).

**Antony Cooper** | Chair | ICA Commission on Geospatial Data Standards | South Africa ●

## GeoVisualization

[geoanalytics.net/ica/](http://geoanalytics.net/ica/)

### Recent Commission Activities

The ICA Commission on GeoVisualization and its members have been active in pursuing key Commission objectives this year. This has involved coordinating and participating in multi-disciplinary international events in which cartographic interfaces for spatial information exploration are presented, used, evaluated and discussed. Research presented at these meetings is being published through peer-reviewed papers. A special issue of *CaGIS* was produced following our workshop at GIScience 2009 ([tinyurl.com/CAGIS-36-3/](http://tinyurl.com/CAGIS-36-3/)).

We contributed to IEEE VisWeek in Atlantic City, New Jersey with Jason Dykes chairing well-attended *Space-Time* sessions in the Information Visualization and VAST conferences. These sessions contained 12 papers in total and a number of posters related to geovisualization were also presented at the Worlds' primary visualization meeting. The complete program is available online at [vis.computer.org/VisWeek2009/](http://vis.computer.org/VisWeek2009/).

We have also organised several tutorials, including *Exploring Design Decisions for Effective Information Visualization* developed by Jason Dykes and Jo Wood for VisWeek (October 2009) and Gennady Andrienko's tutorials at EPFL Lausanne (June 2009), HFT Stuttgart (July 2009), University of Gävle (August 2009), at the ICA Commission on Geospatial Analysis

and Modeling workshop). For more information, see [gicentre.org/infoVis/](http://gicentre.org/infoVis/) and lecture notes at [geoanalytics.net/and/](http://geoanalytics.net/and/) (Lectures section).

Many of the preliminary research papers presented at our 3-day workshop in Hamburg have been developed into research papers with formal and informal help from the Commission in terms of pre-submission feedback and post-submission peer review. Six papers have been submitted for consideration for a special issue of *Computers Environment and Urban Systems* that the Commission is coordinating and hoping to publish in the Spring. Reviews are complete and authors are preparing resubmissions. Two others have been submitted to *The Cartographic Journal*. Other papers and bids for research funding have developed from work presented and ideas developed at the meeting, including a paper outlining a hierarchical expression language for visualization developed by Slingsby *et al.* (2009) following positive feedback to their prototype software. This paper won an Honorable Mention at InfoVis and can be found in *IEEE Transactions on Visualization and Computer Graphics* 15(6).

### Future Plans

The cross-disciplinary emphasis of activities is epitomised by a Dagstuhl Seminar organised by Jason Dykes, Matthias Müller-Hannemann and Alexander Wolff on *Schematization in Cartography, Visualization, and Computational Geometry*. The meeting in November 2010 will bring together cartographers and those with expertise in information visualization, graph drawing and computational geometry to share ideas on schematic maps and their automation and to develop ways forward ([tinyurl.com/schemCarto10](http://tinyurl.com/schemCarto10)). Contact Jason Dykes for details.

The Commission is organising a workshop at the AGILE Conference ([agile2010.dsi.uminho.pt/](http://agile2010.dsi.uminho.pt/)) on 1 May 2010 and a related special issue of the International Journal of Geographic Information Science with a tentative publication date of September 2010.

The workshop is a follow-up of the successful workshops on *Visualization, Analytics and Spatial Decision Support* at the GIScience'2006 conference, *Geovisualization of Dynamics, Movement and Change* at AGILE'2008, and *GeoSpatial Visual Analytics* at GIScience'2008.

The theme for the Workshop is the use of GeoVisual Analytics approaches for exploring and analysing large data sets with both spatial and temporal components. Original papers are solicited in this area. In particular, we encourage innovative papers detailing tight integration of visualization, data mining, database processing, optimization and other computational processing methods.

The workshop will provide participants with the possibility to present ongoing work and ideas that are in development without commit-

ting to a full journal paper. The journal special issue will provide participants with the opportunity to report their work to the community in a refereed journal as we continue to publish widely on developments in interactive exploratory maps.

Example topics include, but are not limited to, the visualization and interactive analysis of large data sets representing:

- individual and group movement behaviours, either in physical or virtual spaces
- dynamics of geo-localised sensor data
- spatio-temporal events
- remotely sensed data, multi-scale and multi-temporal
- large high-dimensional data sets in space and time
- streams of spatio-temporal data
- models and semantics of time in geospatial visual analytics
- knowledge construction and reasoning about spatial and temporal phenomena and processes
- application of innovative visual analytics methods to real-life problems

Organizers and Guest Editors are Gennady and Natalia Andrienko, Jason Dykes, Menno-Jan Kraak, and Heidrun Schumann.

Other information, including paper submission and selection procedures, along with a full report of Commission activities can be viewed at the Workshop's website [geoanalytics.net/GeoVA\(t\)2010](http://geoanalytics.net/GeoVA(t)2010).

These activities and the links that are being forged between communities as a result are ensuring that the Commission's key objectives of promoting and developing maps and cartography are being achieved.

**Gennady Andrienko and Jason Dykes** | Chair / Co-Chair | ICA Commission on GeoVisualization | Germany / UK ●

## History of Cartography

[www.stub.unibe.ch/ica-chc/](http://www.stub.unibe.ch/ica-chc/)

### International Symposium in Arlington, Texas, USA

The 3rd International Symposium on the History of Cartography *Charting the Cartography of Chartered Companies* will be held at the University of Texas at Arlington (UTA), 10-12 October 2010. It is organized by the ICA Commission on the History of Cartography, in collaboration with the UTA Chair in the History of Cartography, the UTA Library Special Collections, and the Texas Map Society. The Symposium will be open to all cartographers, geographers, historians, map collectors, academics and lay persons interested in the history of cartography from the mid-18th to the mid-20th centuries.

The Commission welcomes paper and poster

submissions investigating scientific developments in:

- the mapping legacy of chartered companies
- any cartographical activity between 1750 and 1999
- both terrestrial mapping and maritime charting
- mapping of both a topographical and a thematic nature

Deadline for abstracts submission is 28 February 2010. More information appears on the Commission's website [www.icahistcarto.org](http://www.icahistcarto.org).

**Elri Liebenberg** | Chair | ICA Commission on the History of Cartography | South Africa ●

## Mapping from Satellite Imagery

[mailer.fsu.edu/~xyang/ica/](mailto:mailer.fsu.edu/~xyang/ica/)

### EOGC2009 in Chengdu, China

The Second International Conference on Earth Observation for Global Changes (EOGC2009) was successfully held in Chengdu, China, 25-29 May 2009. The EOGC2009 was sponsored by the ICA Commission on Mapping from Satellite Imagery, together with three other international professional societies, i.e.

International Society for Photogrammetry and Remote Sensing (ISPRS), International Association of Geodesy (IAG), and International Society for Digital Earth (ISDE). William Cartwright (ICA President) and Zhilin Li (ICA Vice President) served in the EOGC2009 International Advisory Committee. Xiaojun Yang (Chair of the ICA Commission on Mapping from Satellite Imagery) and Jonathan Li (Vice Chair of the Commission) led the EOGC2009 Scientific Committee. In addition, Yifang Ban (Sweden) and Julian Smit (South Africa) served in the EOGC2009 Scientific Committee.

The EOGC2009 has received more than 680 abstracts and 456 full papers. More than 320 delegates from 20 countries or regions attended the conference. In addition, seven industrial sponsors presented their services and products in the exhibition space. The opening session

Opening of the EOGC2009 Conference in Chengdu, China | *Photography courtesy Xiaojun Yang*



The epicenter of the Wenchuan Earthquake that struck on 12 May 2008, Yingxiu, China | *Photography courtesy Xiaojun Yang*

featured the presentations by international speakers from ICA, ISPRS, IAG, ISDE, United Nations Environment Development (UNEP), Asia-Pacific Space Cooperation Organisation (APSCO), Chinese Academy of Sciences, and Peking University. Five Best Student Paper Awards were presented to the graduate students from China, Canada, USA and Hong Kong. Several well-know scholars delivered keynote presentations, including John Townshend (University of Maryland, USA), Chris Rizos (University New South Wales, Australia), Emilio Chuvieco (Universidad de Alcalá, Spain), Ashbindu Singh (UNED), Jun Chen (ISPRS), Qingxi Tong (Peking University, China), and Wei Zhang (APSCO).

The EOGC technical sessions covered a wide range of topics on thematic applications of remote sensing, GNSS and GIS technologies to Earth observation and disaster management. Specific topics included coastal and marine ecosystems, land use and land cover changes, earthquake monitoring and assessment, urbanization and environmental impacts, geodetic techniques for global changes, and vegetation mapping and analysis.

The conference was formally closed in the morning of 29 May after the presentations by universities from China, Germany, Canada and the USA on their GIS and Remote Sensing programmes. The afternoon of the 29th was dedicated to a technical field trip to Yingxiu, the epicenter of the Wenchuan Earthquake that struck on 12 May 2008.

The post-conference publications include a SPIE volume entitled *Remote Sensing of Earth Surface Changes*, with a total of 80 peer-reviewed papers to be published in 2009, a Springer book on *Advances in Earth Observation of Global Change*, with about 20 peer-reviewed chapters (expected 2010), and a special issue on *Earth Observations and Remote Sensing for Environmental Management and Hazard Mitigation* with about 6-10 peer-reviewed papers, to be published by the *IEEE Journal of Selected Topics in Earth Observations and Remote Sensing* in 2010.

**Xiaojun Yang** | Chair | ICA Commission on Mapping from Satellite Imagery | USA ●



## Maps and Graphics for Blind and Partially Sighted People

[www.ica-tactile.ucalgary.ca/](http://www.ica-tactile.ucalgary.ca/)

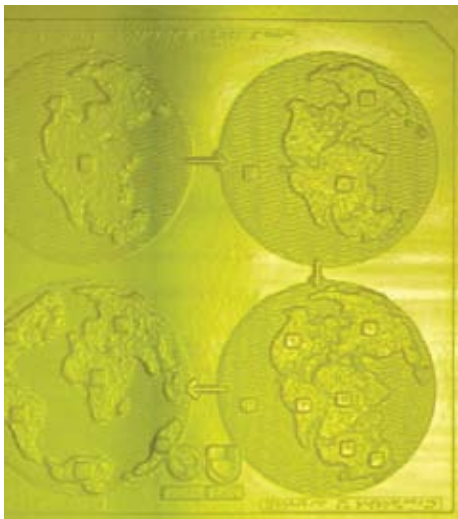
### Meeting in Santiago, Chile

The conference in Santiago, Chile provided an excellent venue for a continuing activity within the commission: a venue to establish new collaborative relationships, ideas for future research, and to connect with existing colleagues and friends. We would like to extend our gratitude to our hosts and the local organising committee.

Conference activities relating to the commission included a total of 11 presentations, posters, and papers. Research was presented from Chile, Brazil, France, Canada, USA, Russia, and Sweden. In addition there were several national posters including tactile map components demonstrating the involvement and collaborative efforts between Universities, advocacy groups and providers of national mapping data.

The conference provided a venue for the re-invigoration of activities within the commission. After the conference, Centro de Cartografía Táctil (The Centre for Tactile Maps) in Chile kindly opened its doors to the Commission for a guided tour ([www.ctactil.cl](http://www.ctactil.cl)). The Centre is one of the central arenas for tactile map development and research in Latin America, and a key institute for the dissemination of educational materials throughout the Americas.

During the conference their work was showcased in posters and in presentations on the development of a tactile map curriculum for blind students on the geographical issues surrounding global warming. After exhaustive usability testing they were able to standardise map production using a locally produced machine, producing robust tactile and relief maps.



An example of a tactile map describing Earth's continental shift | Image courtesy of Centro de Cartografía Táctil, Chile

Presentations included a wide range of foci, from general reports on the status of tactile mapping and cartography in countries, to the development of new map reproduction technologies, including standardisation issues, and ideas for disseminating tactile maps. Research presented also included work on auditory display and the sonification of maps, and a comprehensive accessibility study in Sweden on the effect which minor changes to the built environment would have on individuals with disabilities. At the other end of the research continuum, algorithms for parsing natural language directions to provide a verbal navigation repository for blind individuals were illustrated. Innovations in interface technology for separating modalities for intuitive map exploration were shown. Haptic (force-feedback) maps to provide independent navigation seafaring opportunities for blind sailors were presented as a practical example and an

opportunity to explore the theoretical implications of integrating navigational frames of reference, and modes of exploration on the ocean and in virtual environments.

The commission looks forward to Paris in 2011 and to establishing further workshops and collaborative relationships with other commissions.

**Dan Jacobson** | Chair | ICA Commission on Maps and Graphics for Blind and Partially Sighted People | Canada ●

## Maps and Society

### Meeting in Santiago, Chile

The ICA Commission on Maps and Society participated in a highly successful ICA conference in Santiago. Well attended technical sessions focused on our thematic interests included three sessions themed as Maps and Society along with two sessions on the theme Critical Cartography. Papers in these sessions were presented from delegates from Canada, USA, China, Brazil, Spain, UK, Brunei, Australia, New Zealand and Belgium. In addition posters relevant to our interests were presented from USA and Columbia.

A Commission meeting was held during the conference and priorities for the next two years were discussed including developing the web presence of the Commission, research and practical priorities, potential collaborations with other Commissions and outside ICA, and potential future meetings.

**Chris Perkins** | Chair | ICA Commission on Maps and Society | UK ●

Participants of the ICA Commission on Maps and Society meeting in Santiago, Chile | Photography courtesy Chris Perkins





Participants of the ICA Commission on Maps and the Internet Symposium in Valparaiso, Chile | *Photography courtesy Michael Peterson*

## Maps and the Internet

[maps.unomaha.edu/ica/](http://maps.unomaha.edu/ica/)

### Symposium in Valparaiso, Chile

The ICA Commission on Maps and the Internet held a symposium in Valparaiso, Chile, 13-15 November 2009, immediately prior to the ICC in Santiago. Located on the coast approximately two hours west of Santiago, Valparaiso was an ideal location for a pre-conference meeting.

Participants came from Austria, Australia, Belgium, Canada, Chile, Czech Republic, Finland, Germany, Japan, Poland, and the USA. Paper sessions were held on November 14 and topics included ubiquitous web mapping, multimedia mapping, web map evaluation, GeoRSS, XML, and geospatial Mashups. The meeting was hosted by the Hydrographic and Oceanographic Service (SHOA) in Valparaiso. Captain Patricio Carrasco Hellwig of the Chilean Navy gave a tour of the facilities and hosted the group for lunch.

The all-day meeting was preceded by a dinner on the evening of November 13 with a presentation by Colonel Juan Vidal Garcia-Huidobro, Director del Instituto Geográfico Militar, Santiago, Chile, and President of the Local Organizing Committee for the 24th International Cartographic Conference. A tour of Valparaiso on 15 November brought an end to the meeting.

### Future Plans

It was decided at the business meeting for the commission during the main conference in Santiago that the next meeting would take place in November 2010 in Orlando, Florida in conjunction with the AutoCarto 2010 Symposium.

The focus of the meeting will be on web services and will lead to an edited book. This will be the third publication from the commission, following: *Maps and the Internet* (2003, 2005-paperback) and *International Perspec-*

*tives on Maps and the Internet* (2007).

**Michael Peterson** | Chair | ICA Commission on Maps and the Internet | USA ●

## Marine Cartography

[www.shoa.cl/ica/](http://www.shoa.cl/ica/)

### Meeting in Santiago, Chile

On 17 November 2009, the ICA Commission on Marine Cartography (CMC) met during the ICC 2009. During the meeting, representatives of Croatia, USA, France, Turkey and Chile and Jeppesen Marine, with special participation of the ICA President William Cartwright, discussed several ideas to publicize and disseminate the importance of the Commission's work, particularly with regards to big changes that will be facing the Electronic Nautical Cartography worldwide. The meeting provided an introduction to the objectives and functioning of the commission and detailed different issues such as the new IHO S-100 standard, ECDIS use, e-navigation and future plans for the commission.

The Chilean Hydrographic and Oceanographic Service (SHOA) hosted the Commission's seminar at the City of Valparaiso, together with the ICA Commission of Maps and the Internet.

**Patricio Carrasco and Claudio Sobarzo** | Chair / Secretary | ICA Commission on Marine Cartography | Chile ●

## Planetary Cartography

[www.univie.ac.at/cartography/karto/project/cnra/](http://www.univie.ac.at/cartography/karto/project/cnra/)

### Meeting in Santiago, Chile

During the XXIV ICC Conference in Santiago, Chile, a session and a meeting of the ICA

Commission on Planetary Cartography were held. Both events were prepared by Kira Shingareva (Russian Federation) and Henrik Hargitai (Hungary) and facilitated by Henrik Hargitai (Kira Shingareva was unable to attend due to unexpected administrative reasons).

The main topics of the sessions were: the International Planetary Cartography Database, virtual globes of Venus, Mars and the Moon, nomenclature of planetary surface features (current state and challenges), multilingual map series project, conception of a geo-database and an application-oriented query system for geological mapping of Martian surface. It is necessary to underline that most of Commission projects are international, organized and realized by the cooperation of several countries. For example, the International Planetary Cartography Database is a joint project of ELTE University Budapest and MIIGAIK Moscow, and the virtual globes of Venus, Mars and the Moon is a joint project with the Virtual Globe Museum.

During the meeting the following Commission plans have been discussed:

- The new series of multilingual maps of giant planets' satellites. The first one is the preliminary version of the map of Io (it was demonstrated at the *Planets and Space* session by Manfred Buchroithner within a joint project of TU Dresden and MIIGAIK, Moscow). The planned ones include Ganymede, Europa, Callisto. Our goal is to publish this series in other languages as well. The distribution of maps is a problem.
- By the next ICC in Paris we plan to publish a glossary of terms for planetary cartography in five languages. This project is currently in the editing stage.
- Two databases are planned to be connected to the virtual globes (or maps) and linked together. The *Database of Planetary Landform Types* (in general) is under development. It would contain general description and interpretation of feature types. The *Database of Planetary Landforms* (by name) would contain a list of the major named and unnamed features of planetary bodies together with images, data, descriptions, interpretations.

The revision of planetary nomenclature is a complex issue. In our work there are two opposite directions: one is standardization and the other is the diversification. Both are important. From scientific point of view, corrections in *IAU/USGS Planetary Nomenclature Gazetteer* would be necessary since it includes mistakes. We have also made some general recommendations on the present nomenclature system, especially concerning widely used informal names. For products made for the general public (especially aimed for children) we would promote diversity in visual styles and a nomenclature using local languages in addition to Latin names.



We would like to propose that the UN should establish a working group on planetary names. We understand that the task of the development of the planetary nomenclature system have been passed from the UN to the IAU, but now it is needed to harmonize extraterrestrial nomenclature with the terrestrial one and to have a more accurate database. Therefore, there is a need for a body which is an expert in both terrestrial and extraterrestrial naming systems. Such a group existed until 1974 under the leadership of A. Komkov (USSR). We are sure that it is possible to discuss this proposal further and find an acceptable solution. The names as a cultural heritage are of the great importance for mankind.

The Commission proposes the following initiatives:

- To send an online questionnaire to cartographic agencies and state organizations all over the world asking about their attitude (relations) towards planetary cartography in general and their possible participation.
- To inform Publishing Houses in many countries about the existence of planetary maps in order to persuade them to replace old photo-and-description style presentation pages of the Solar System with maps in a visual style similar to those used in the particular World Atlas they are publishing.
- To join forces with the ICA Commission on Cartography and Children in the field of planetary cartography education and geography of extraterrestrial territories.
- To digitise the Commission's existing maps and publish them in PDF format as images and text. The digitization could be carried out at university departments. The hand drawn hill shading is very valuable even in the digital environment, therefore these maps should reach a wide audience via the Internet.
- To support Andrea Nass (DLR) working on a project which involves the description of a

working infrastructure system for the creation of professional planetary base maps, which geologists can use to add their data. It would be very useful for countries where planetary geologists have no planetary cartographers to work with.

**Henrik Hargitai and Kira Shingareva** | Member / Chair | ICA Commission on Planetary Cartography | Hungary / Russia ●

## Theoretical Cartography

[rcswww.urz.tu-dresden.de/~wolodt/tc-com/](http://rcswww.urz.tu-dresden.de/~wolodt/tc-com/)

### Seminar in Kyiv, Ukraine

Under the title *10 Years of the ICA Commission on Theoretical Cartography* the Commission held a seminar between 1-2 October 2009 in Ukraine at the Kyiv Production and Scientific Enterprise *Cartography* under the leadership of Dr Rostyslav Sossa (main sponsor of the seminar). The two-day seminar included seven paper and five poster presentations on the first day, and a small social program on the second day.

The results of the seminar will be published as a collection of papers in the e-journal *meta-carto-semiotics* ([meta-carto-semiotics.org](http://meta-carto-semiotics.org)), vol 2, 2009 (eds F Hruby and A Wolodtschenko) and in the cartosemiotic issue of *Diskussionsbeträge zur Kartosemiotik und zur Theorie der Kartographie*, vol 12, 2009 (eds H Schlichtmann and A Wolodtschenko).

### Meeting in Santiago, Chile

The ICA Commission on Theoretical Cartography held a meeting on 20 November 2009 during ICC 2009 in Santiago, Chile. The program included the following topics:

- Chair report about the Commission's activities 2007-2009 (A Wolodtschenko)

- Report on the terminology project (H Schlichtmann and A Wolodtschenko)
- A new concept of metacartosemiotics (A Wolodtschenko)

### Future Plans

In May 2010, the Commission is planning a workshop in Kyiv, Ukraine. In September 2010 there will be a theoretical-methodical conference *Theories of Map Design in Digital Era* in Hong Kong, co-organized by Prof Zhilin Li from Hong Kong Polytechnic University, and in November, a theoretical seminar *Multimedia in Cartography: new ways and possibilities* at Torun University, Poland, coorganized by Prof Zenon Koziel.

For 2011 the Commission is planning a meeting prior to the ICA Conference in Paris and the 6th Cartosemiotic Seminar at Vilnius University, Lithuania.

**Alexander Wolodtschenko** | Chair | ICA Commission on Theoretical Cartography | Germany ●

## Use and User Issues

[www.univie.ac.at/icacomuse/](http://www.univie.ac.at/icacomuse/)

### Recent Commission Activities

The ICA Commission on Use and User Issues is looking back at a successful conference in Santiago, Chile. The *user* was very visible in four dedicated oral sessions, the poster displays and in two Commission meetings, which were all well attended. We are particularly pleased by drawing the attention of young researchers. Out of almost 30 people present at the open Commission meeting, half were current PhD students engaged in their doctoral research.

### Future Plans

The Commission's next activity is a workshop on *Methods and Techniques of Use, User and Usability Research in Geo-information Processing and Dissemination* which will be held on 13 April 2010 at the University College London. The workshop is organized in conjunction with GISRUK 2010, a conference on GIS research that traditionally attracts many young researchers. Many proposals have been received for presentations at the workshop, specifically on the application of use, user and usability research methods and techniques. The best papers may be the basis for contributions to the research handbook the Commission is working on. Everyone interested in attending the workshop and GISRUK 2010 can find more information on the Commission's website and on the GISRUK site (see [gisruk2010.spatial-literacy.org/](http://gisruk2010.spatial-literacy.org/)).

**Corné van Elzakker** | Chair | ICA Commission on Use and User Issues | The Netherlands ●

Participants of the Kyiv Seminar, Ukraine | *Photography courtesy of Alexander Wolodtschenko*





Art and Cartography paper session at ICC 2009; even on the last day of the conference, the room was barely big enough to accommodate the public | *Photography Barbara Piatti*

## Art and Cartography

[artcarto.wordpress.com/](http://artcarto.wordpress.com/)

### WG Activities

The ICA Working Group (WG) on Art and Cartography was pretty active at the ICC 2009 in Santiago, Chile, last November. Since the group was created at the Moscow conference in 2007, this was our first working group meeting. 19 persons attended the meeting.

Since 2007 we already have achieved quite a lot:

- Conference in Vienna in February 2008
- Edited book *Art and Cartography*, Springer, 2008 (Cartwright W., Gartner G. and Lehn A. (Eds))
- Committee meeting in Melbourne in November 2008
- Special issue on Art & Cartography, *The Cartographic Journal* 46(4), 2009 (Caquard, S., Piatti, B., and Cartwright W., (Guest eds))

During the working group meeting we also discussed future activities of the WG such as holding workshops and conferences in 2010 and 2011. Some places and topics were suggested (e.g. Montréal or Berlin 2010; Puchberg, Brighton, Basel/Zurich 2011). The decision will be made in early 2010 after further evaluation of the logistical and intellectual merit of the different options. The outcome of these activities will be either an edited book or a special issue of a scientific journal.

During the meeting we have also presented our “manifesto”, which includes the following points: “... time is required in order to build solid bridges between cartography and the arts; therefore, we want to promote a slow publication philosophy (focusing more on quality/diversity than on quantity)” (see [artcarto.wordpress.com/manifesto/](http://artcarto.wordpress.com/manifesto/) for more details).

During the conference the Working Group organized a movie screening of two edited videos; a short 8-minute one entitled *Virtual*

*globes were born in cinema: A century of envisioning dynamic maps in movies* and edited by Sébastien Caquard, and a longer one (45 min) entitled *A historical review of maps in film* edited by Giacomo Andreucci. The event was quite successful with about 100 participants joining us for this screening.

Finally we had two paper sessions in which eight papers were presented. Both sessions were very well attended (up to 110 people), illustrating the interest of many cartographers for knowing more about the interaction between cartography and art. The only small issue was that a couple of papers in these sessions didn't really belong to Art & Cartography theme, while some other papers would have been more relevant. Beside this minor issue, we thought that the conference was a real success. We would like to thank the organizers for the quality of the organization, as well as the participants for the quality of their contributions.

**Sébastien Caquard and Barbara Piatti** | Co-Chairs | ICA Working Group on Art and Cartography | Canada / Switzerland ●

## Cartography on Early Warning and Crisis Management

### Recent WG Activities

On 2-4 April 2009, the Macao government invited Prof Milan Konečný (Czech Republic), Chair of the ICA Working Group (WG) on Cartography on Early Warning and Crises Management, to attend the Macao International Environmental Co-operation Forum and Exhibition and share ideas on the usage of geoinformatics and cartography in solving contemporary environmental problems. During

the Natural Disaster Management symposium, Prof Konečný delivered an address on *Ubiquitous Mapping for Early Warning and Crises Management: How to deliver information to individuals?* Many of the participants from outside the GI community were surprised by the power and potential of maps and generally spatial information in solving complicated crises problems and situations.

On 22 April 2009, the WG and the Department of Cartography of the Siberian National Academy of Geodesy (SGGA) in Novosibirsk, led by Prof Dimitrij Lisickij, organised a special seminar within the international GeoSiberia conference. The seminar was attended by more than 100 participants, mainly Russian specialists, who discussed problems of early warning and crises management as well as issues associated with world-wide cooperation on this subject. At the seminar, Prof Konečný delivered a paper entitled *Cartographic and Geoinformatics Potentials in Early Warning and Emergency Management*. A very positive aspect of the meeting was participation of many young students and PhD candidates from SSGA and also senior specialists who deal with this topic. Argina Novickaja and Vladimir Seredovich did an excellent job in facilitating the meeting, which was sponsored by Prof Viktor Karpik, rector of SSGA. It was decided to start a tradition of the WG meetings at the GeoSiberia, which this time attracted over 1,500 participants from 15 countries who attended the scientific programme, workshops and round tables.



Participants and organisers of GeoSiberia, Novosibirsk, Russia | *Photography courtesy of Milan Konečný*

The China–EU Early Warning and Emergency Management Seminar on *Challenges, Best Practices and Perspectives* was held in Beijing, China, 13-14 May 2009. Prof Konečný was asked by the EU delegation in China and the Czech Embassy to organise speakers from EU for the meeting and cooperate with National Chinese School for Public Administration. Participants consisted of officials from the Chinese government. Discussion was very open and inspirational, with many people immediately realising the value of maps, GIS and remote sensing in everyday work, and especially in crises situations.

On 2 June 2009, as a part of AGILE 2009 conference, a Workshop GI@earlywarning was organized by Martin Breunig, University of Osnabrück and Wolfgang Reinhardt, University



## reports ica working groups cont...



China-EU Seminar in Beijing, China | *Photography courtesy of Milan Konečný*

of the Bundeswehr in Munich (Germany). Prof Konečný delivered a keynote speech on *Cartography and Geoinformatics in Early Warning and Emergency Management: How to enhance the role of individuals?* The workshop's programme featured a paper by Ulrich Bartling, Gennady Andrienko and Natalia Andrienko, Fraunhofer Institute IAIS, St Augustin (Germany) *First Experience with a Visual Analytics Tool to User-Controlled Evacuation Scheduling*. The event was a continuation of cooperation of several GI international organizations on early warning and crises management.

The WG organised several activities at the ICC 2009 in Santiago, Chile. An excursion to the Military Centre for Crises Management (CEOTAC) and Civilian Emergency Management Office (ONEMI), both located in Santiago, was attended by 60 participants. At CEOTAC the participants learnt about the problems with disaster management in Chile and shown a training centre that prepares military specialists to solve incoming problems. At ONEMI practical shows of activities during the time of crises and a simulator designed for children and adults with instructions on how to behave

during an earthquake were demonstrated to the participants. The examples of using maps in crises situations were impressive and discussion on how to create internationally accepted standards and metadata services for such maps followed. The WG meeting was held on Saturday, 21 November. Participants discussed the Group's research programme and the progress made with its realisation. A relationship between WG activities with the ICA Research Agenda was investigated. The participants preferred to identify real problems associated with early warning and crises management, user needs and profiles of decision makers first, before creating relevant cartographic models to help solving problems and, by doing so, enriching the research agenda. There were two oral sessions within the Conference programme devoted to

emergency management issues chaired by Prof Konečný.

### Future Plans

The WG is planning a meeting and seminar in April 2010 at GeoSiberia Conference in Novosibirsk, Russia, a seminar in Nessebar, Bulgaria in association with the 3rd International Conference on Cartography and GIS in June ([www.cartography-gis.com](http://www.cartography-gis.com)), a meeting at the Digital Earth Summit ([www.cartography-gis.com/digitalaearth/](http://www.cartography-gis.com/digitalaearth/)) in Orlando, USA and another meeting at AutoCarto'2010 Symposium in November 2010. Under discussion are also events in Indonesia and China (Wuhan).

**Milan Konečný** | Chair | ICA Working Group on Cartography on Early Warning and Crisis Management | *Czech Republic* ●

Participants of the ICA Working Group on Cartography for Early Warning and Crises Management excursion to CEOTAC in Santiago, Chile | *Photography courtesy of Milan Konečný*



## reports cartographic meetings and events

### InterCarto-InterGIS 15

#### InterCarto Meeting in Perm, Russia

The Russian part of the InterCarto-InterGIS 15 Conference took place between 26 June and 2 July 2009 at the Perm State University. 160 participants from Russia and some foreign countries attended the conference. The program included plenary sessions (organised by themes), seminars and round tables. There were seven main session themes:

- Geoinformation supply of sustainable development of territories
- Infrastructure of spatial data
- Remote sensing of the Earth
- Geoinformation supply for solution of water-ecological, geomorphological, geological and geophysical problems
- Ecologic-geoinformation aspects in sustainable development

- Sustainable development and tourism
- GIS-FORMATION for sustainable development

The themes of seminars and round tables included:

- GIS and business
- Infrastructure of the spatial data in hydrological researches
- Historical geoinformatics

A DVD containing conference proceedings from this event and a unique collection of Russian materials from all InterCarto conferences since 1994 was launched at the beginning of the meeting.

The participants were welcomed by IN Shubin, Head of Perm, MN Shejfel, Adviser to the Chairman of Perm Krai Government, and Prof VV Malanin, Rector of Perm State University.

The program started with presentations by VS Tikunov on the history of InterCarto-InterGIS

conferences, periodicals and international educational programs in the field of GIS and cartography, and by AN Krajuhin on the completion of a long-term project involving publication of the four-volume *National Atlas of Russia* and further developments in the creation of fundamental cartographic products.

In the report by P De Maeyer the evaluation of world and national geoinformation markets was touched. Diversity of approaches in different countries makes the comparative estimation of their size more complicated, both as a whole, and within its separate sectors, including private (GIS-BUSINESS), public (state) and consumer. Prompt development of B2C model (business to consumer), was explained by expansion of auto navigating and mobile personal geoinformation services.

In his presentation F Ormeling outlined the EuroGeoNames project, which started in 2006 and is financed by European Union. The



Participants of the InterCarto-InterGIS 15 Conference in front of the Perm State University, Perm, Russia | *Photography courtesy of Vladimir Tikunov*

project aims to create an all-European database (DB) of geographic names. In 2004 still 1:10 000 and 1:25 000 topographic maps served as the basis for toponymic DB and electronic gazetteers. The project delivers a solution to the important problem such as multilingual support of toponymic data and offers a public web service allowing a geographic name search within the DB. The EuroGeoNames model will be used for preparation of specifications and other documentation for the INSPIRE program and the project will continue till 2012.

The history of geoinformation researches in Perm Oblast and Perm Krai was the subject of SV Pjankov's report (Perm State University). The author distinguishes four periods:

- prehistorical (till 1990), when first attempts of development and implementation of geoinformation technologies were made
- pre-market, characterized by continuation of experiments in the 1990s, which was difficult enough in the absence of a regional cartographic school
- state (1993-2003), when a region became the leader in realisation of pilot GIS projects for public authorities
- market, which began in 2003; in 2008 the volume of the today's regional geoinformation market is estimated by the sum of 100 million rubles.

The Conference was well organised providing friendly atmosphere of cooperation between a wide range of experts coming from geoinformation, scientific, educational and industrial communities. A resolution was reached (see [www.gis.psu.ru/InterCarto/resolution](http://www.gis.psu.ru/InterCarto/resolution) and [www.gisa.ru/54584.html](http://www.gisa.ru/54584.html) for more details) that provided a basis for some current developments. For example, Perm State University and REKOD Enterprises reached a cooperation agreement for developing a long-term target program *Using the results of space activity in the interests of social and economic development of Perm Krai for 2010-2012*, and

providing regional information-navigation infrastructure.

Later in July 2009, the results of the conference were reported at the Information Council of the Perm Krai Government. The Perm State University presented an initiative to form a working group on creation and development of spatial data infrastructure for Perm Krai. The initiative was accepted by the Chairman of Government. Prof Tikunov was invited to participate in this important event. He delivered a keynote address and a congratulating speech on behalf of the ICA.

### InterGIS Meeting in Ghent, Belgium

The InterGIS Conference took place between 3-6 July in Ghent, Belgium and gathered 50 participants. The session themes focussed on using GIS in different fields, like nature protection and ecological activity, road economy and navigation, space monitoring and mapping, studying of dynamics of land use, prevention of consequences of natural catastrophes, demography, remote training, creation spatial data infrastructure and its components.

After an opening speech of P De Maeyer, Chair of the Organizing Committee, two plenary presentations were delivered. The first dealt with the use of geoinformation technologies for the analysis of global demographic processes (VS Tikunov) and the second presented a history of *neocartography*, entitled *From maps by Ortelius to the Openstreetmap.org service* (F Ormeling). Tikunov emphasizes the importance of maps, the mathematical and cartographic modeling and various GIS tools in studying demographic processes and illustrated his points with a series of animated anamorphic maps of global demographic changes. Important changes in modern cartography have occurred recently. According to F Ormeling theoretical works in the field of cartographic communications anticipated the use of information technologies in cartography (A

Kolacny) which now take the form of computer maps, appearance of geoinformation technologies, modern cartographic web services, LBS-services in smart phones and communicators and cartographic services in car navigators.

25 presentations were delivered within seven sessions illustrating the changes of methods and means of modern cartography and a steady migration of geoinformatics from GIS to an SDI paradigm. For example, a presentation by G Bekonyte and Z Stankevichius covered the creation of national spatial data infrastructure of Lithuania LGII released in April 2009 with a brief outline of its beginnings as a national geoportal ([www.geoportal.lt](http://www.geoportal.lt)). The current state of its development is focussing on the necessity of harmonizing LGII with a European framework. The multilingual dictionary of geoinformation terms, based on terminological standard ISO 19104, is a component of LGII geoportal and includes Lithuanian terms and their English equivalents.

A presentation by SA Timonin reported the development of cartographic web services for statistical mapping, in particular population mapping, that is designed to create demographic maps, such as migration maps, based on geoportal technological decisions. The prototype of a geoportal *Demography* is supported by OGC specifications, including WMS, WFS and WCS and the metadata files are based on ISO 19115:2003 standard.

The last day of the Conference featured two seminars of the International Cartographic Association, where mobile GIS and the current state of Russian SDI were discussed.

AV Koshkarev *et al.* reported that contrary to the opinion of western analysts who claim that nothing is done with regards to the national SDI in Russia except working out *Concepts of creation and development of Spatial Data Infrastructure of the Russian Federation*, Russian experts did a lot in this field. With an absence of any SDI initiatives at the federal level, SDI begins to develop in regions and departments. There are examples of fully functional regional SDIs or their prototypes, such as the Regional SDI of Samara region, Bank of spatial data of the Ural federal district and planned departmental SDI for cadastre of real estate objects.

Proceedings of the InterGIS were made available to all delegates (in English). Excellent organization of sessions, various excursions in Ghent and Bruges, including the museum of G Mercator, and a pleasant environment for setting up international meetings has again confirmed that the idea of "dual citizenship" of the conference works well.

The next InterCarto-InterGIS 16 Conference will take place in July 2010 in Rostov-on-Don, Russia and in Salzburg, Austria.

Vladimir Tikunov | MV Lomonosov Moscow State University | *Russia* ●





Participants of the first International Conference on 3D Cartography in Dresden, Germany | *Photography N Holzer*

## International Conference on 3D Maps

The first International Conference on 3D Cartography held between 24-28 August 2009 in Dresden, Germany and endorsed by the International Cartographic Association attracted delegates from nearly every continent for a rare opportunity to focus on an area of specialisation which is seldom explored in such depth.

While 3D visualisation has become fairly commonplace within a computing environment, can the cartographer deliver more? Is a computer file an enduring record, and is it truly accessible to all? What are the options to provide quality hard copy in 3D to our clients?

From a thought provoking keynote address provided by Professor Harold Moellering from Ohio State University to the closing summaries, the presentations provided a rich overview of the current state of the art in 3D mapping. All options were explored, from the exquisite construction of hand carved photo-realistic scale models to autostereoscopic displays, both in hard copy as lenticular foils or computer softcopy. Rapid prototypes and automation of 3D rendering, globes, urban landscapes, stereoscopic map servers and much more were demonstrated. Field excursions covered manufacture and installation of landscape models.

An exhibition of maps and displays at the Dresden meeting | *Photography N. Holzer*



The real power of this conference was the breadth of the vision. A visit to Dresden's Panometre, a powerful and graphically clever depiction of early Dresden, was as informative as the most modern computer visualisation. There are many ways to make 3D 'real' for the user, and we can still learn much from the past. True 3D in Cartography packs a punch. It subverts the viewer into engaging with cartography. It is a bridge to understanding virtual environments, it is dreams made into reality.

The conference brought together practitioners from across the whole spectrum of real 3D to share their enthusiasm and ideas. It was a great success, and it is hoped that more will follow with delegates agreeing that True 3D should be revisited biennially. With rapid developments being driven by user expectations in a world where 3D visualisation is almost commonplace, we need to continue to work together to enhance cartography with this technology.

**Adella Edwards** | James Cook University | Australia ●

## ISO/TC 211 Activities

ISO/TC 211 is the International Organization for Standardization's Technical Committee developing standards for Geographic Information/Geomatics. The following is a brief report of the ISO/TC 211 activities since they were last reported on in the ICA News No 51, in December 2008.

ISO/TC 211 has now published 33 International Standards, seven Technical Specifications and three Technical Reports (see [www.isotc211.org](http://www.isotc211.org)). Over the last year, the following were published:

- ISO/TS 19104:2008, Geographic information – Terminology
- ISO 19111-2:2009, Geographic information – Spatial referencing by coordinates – Part 2:

- Extension for parametric values
  - ISO 19115-2:2009, Geographic information – Part 2: Extensions for imagery and gridded data
  - ISO 19126:2009, Geographic information – Feature concept dictionaries and registers
  - ISO/TS 19129:2009, Geographic information – Imagery, gridded and coverage data framework
  - ISO 19144-1:2009, Geographic information – Classification systems – Part 1: Classification system structure
- Significantly, ISO 19126 is the first standard from ISO/TC 211 that has been published by ISO in French, as well as in English, with the French translation having been sponsored by France. Hopefully, they will be able to sponsor the translation of other standards as well.

New projects that have commenced over the past year are:

- Revision of ISO 19101:2002, Geographic information – Reference model
- ISO 19145, Geographic information – Registry of representations of geographic point location
- Revision of ISO 19115:2003, Geographic information – Metadata
- ISO 19155, Geographic information – Place Identifier (PI) Architecture
- ISO 19156, Geographic information – Observations and measurements
- ISO 19157, Geographic information – Data Quality
- ISO/TS 19158, Geographic information – Quality assurance of data supply
- ISO 19159, Geographic information – Calibration and validation of remote sensing imagery sensors and data
- ISO 19160, Addressing

Of particular interest are the revision of ISO 19115, as it is the best known standard from ISO/TC 211, and the new standard ISO 19157, which will consolidate into one the standards dealing with data quality, namely ISO 19113:2002, Geographic information – Quality principles, ISO 19114:2003, Geographic information – Quality evaluation procedures, and ISO 19138:2006, Geographic information – Data quality measures. ISO 19115 and ISO 19157 will need to be harmonized with one another, so it helps that they are being developed simultaneously. The development of ISO/TS 19158 is being led by EuroSDR and EuroGeomatics, and should be of interest to national mapping agencies, particularly given the increasing number and variety of data sources available to them, including volunteered geographical information (VGI).

ISO 19101 provides the framework for all the ISO/TC 211 standards, and is being revised to cater for new developments in the field, such as ontologies and ubiquitous geographical information (UbGI), and to cater for standards for application domains, such as land cover, land administration and addresses. ISO 19160 is a Stage 0 project, which means that it is not yet

developing an international standard for addresses, but is sketching out the requirements for international standards for addresses, and includes the participation of organizations such as the Universal Postal Union (UPU).

The complete ISO/TC 211 multi-lingual glossary of terms has now been translated into Russian. The complete glossary has also been translated into Chinese and Finnish, and parts have been translated into Arabic, Danish, Japanese and Swedish. The glossary can be downloaded from the ISO/TC 211 web site. Also available there is a comprehensive guide to all the ISO/TC 211 standards and a link to a site with training materials on geo-standards.

The 27th Plenary was held in Tsukuba, Japan, on 4-5 December 2008, the 28th Plenary was held in Molde, Norway, on 28-29 May 2009, and the 29th Plenary was held in Québec, Canada, on 5-6 November 2009, each preceded by Working Group, Project Team and other meetings. The 30th Plenary is scheduled for Southampton, United Kingdom, on 27-28 May 2010, and the 31st Plenary for Canberra, Australia, on 9-10 December 2010. The Netherlands is considering hosting ISO/TC 211 in May/June 2011 and South Africa is considering hosting ISO/TC 211 around October 2011.

**Antony Cooper** | ISO/TC 211 Liaison to the ICA | South Africa ●

## XIX Assembly of PAIGH

The XIX Assembly and Consulting Meeting of the Pan American Institute of Geography and History (PAIGH) took place in Quito, Ecuador, between 26-30 October. Pablo Gran, Vice President of the ICA, was representing ICA at that meeting. He delivered a presentation about ICA and invited all participants to the International Cartographic Conference in Santiago, Chile in November 2009. During the presentation, Pablo Gran delivered a letter to the delegate of the República Oriental del Uruguay of provisional acceptance of Uruguay to the family of ICA member nations.

**Pablo Gran** | Vice President | ICA ●

Participants of the XIX Assembly of PAIGH in Quito, Ecuador | *Photography courtesy of Pablo Gran*



## Children's Map Contest in Bulgaria

For many years, the national editions of the Barbara Petchenik Children's Map contest in Bulgaria have been characterised by excellent organisation and quality of entries. The most recent competition was no different. Dr Rumiana Vatsева from the Institute of Geography organised the competition.



Organisers and participants of the Bulgarian edition of the Barbara Petchenik Children's Map Award 2009: (from right) Rumiana Vatsева, Mariyana Nikolova, Temenoujka Bandrova and Milan Konečný | *Photography Ivan Vasilev*

The award ceremony took place in May 2009 at the Bulgarian Academy of Science in Sofia, Bulgaria. It was attended by parents, relatives and teachers of children who participated in the contest, as well as many academics and researchers from the Academy, including Dr Mariyana Nikolova, Director of the Institute of Geography. My participation in this event was supported by the Institute and I had the privilege of representing ICA in my capacity as Past President.

In addition to DatMap - Europe Ltd and Darik Radio, which traditionally support the Bulgarian competition, the National Geographic Bulgaria also supported the event for the first time. The enthusiasm of children, their teachers, parents and relatives provided inspiration to organisers and sponsors and helped to promote the competition even further.

**Milan Konečný** | Past President of ICA | Czech Republic ●

## Barbara Petchenik Children's Map Awards

### Poland

A small award ceremony took place on 3 December 2009 in Collegium Geographicum of the Adam Mickiewicz University in Poznan, Poland. Karolina Grzabka (11), winner of the Barbara Petchenik Children's Map Award 2009 in the 9-12 age category, received a diploma and 50 EUR from Georg Gartner, Vice President of the ICA who came to Poznan for this occasion. The ceremony was also attended by Karolina's art and biology teacher Mrs Joanna Piechowicz from the Primary School in Plewiska near Poznan and Mr Dariusz Lorek, organiser of the regional competition in Wielkopolska. Karolina's artwork is reproduced on the back cover of this newsletter.

**Beata Medynska-Gulij** | Adam Mickiewicz University | Poland ●



Children's Map Award 2009 ceremony in Poland: (from left) Georg Gartner, Karolina Grzabka, Dariusz Lorek and Joanna Piechowicz | *Photography Beata Medynska-Gulij*

### Hungary

The official award ceremony to honour the Hungarian winner on the Barbara Petchenik Children's Map Award 2009 in the 5-8 age category took place in Budapest, Hungary on 16 February 2009. Adrienn Papp (8) from Elementary School of Remetekertvaros, Budapest received a diploma and 50 EUR from Jesús Reyes Nunez, Co-Chair of the ICA Commission on Cartography and Children. The ceremony was organised in Adrienn's school and attended by all school children. Adrienn's artwork is reproduced on the back cover.

**José Jesús Reyes Nuñez** | Eötvös Loránd University | Hungary ●

Children's Map Award 2009 ceremony in Hungary: Adrienn Papp and Jesús Reyes Nunez | *Photography courtesy of Jesús Reyes Nunez*







Participants of the 24th International Cartographic Conference in front of the Conference venue - Escuela Militar del Libertador Bernardo O'Higgins, Santiago, Chile, immediately after the Closing Ceremony on Saturday, 21 November 2009 | *Photography courtesy of IGM*

## ICC 2009: A UK delegate's view

Santiago was a bit of a revelation to me. I had visited South America before, most recently a couple of visits to La Paz in Bolivia. Santiago has quite a different feel – much more that of a modern cosmopolitan Mediterranean city, at least in the downtown area and the area of the city where the conference was hosted. Lots of high rise offices and modern apartment blocks. People on the streets were generally well dressed, with no army of little old women on street corners all selling the same selection of cigarette lighters, tissues and chewing gum! A very efficient metro system made getting around the city easy, although public transport information could have been more readily available; lots of busses and bus stops, but no maps, not even simple route diagrams or timetables, despite large display cases at many stops (a bit of a hobby horse of mine!).

The conference facilities in the Military School were good, if a little less conveniently organised than a dedicated conference centre. The grounds and the overall ambience were impressive and certainly on first approaching the venue the main facade, an extremely large flag and the military presence made it all very imposing. The courtyard in the centre of the complex was an ideal location for the reception on the first evening. There were the usual issues of small audiences in large halls and large audiences in small rooms – a conference organiser's nightmare. It is difficult to see how this could be easily resolved without elastic rooms or enforced pre-booking, but it was only occasionally an issue. The sessions were organised with military precision, timings being strictly adhered to (although not always). This certainly facilitates moving from one session to another to pick up potentially interesting talks,

but the layout of the school could make this difficult to achieve. Although I only once took advantage of it, it was good to see translation available in all the lecture rooms.

Compared to recent ICCs, I was unaware of speaker no-shows being the issue they have been. This is largely down to the efficiency of the organisers ensuring that speakers were indeed registered. This conference also saw the introduction of fully refereed papers for the first time, if the author so desired. I was informed that the number submitted in this category greatly exceeded expectations and caused some issues prior to the conference. Perhaps this, together with the location and cost, reduced the number of speculative papers submitted and only those with serious intentions went through the vetting procedures. It was not clear from the programme which were refereed papers, but the fact that the text was refereed or not does not necessary influence the quality of either the content or the presentation, so it was probably not a bad thing. The proceedings did convey this information, but they were not the easiest to navigate. More thought needs to be given to this in future.

Of some concern must be the organisation of Commission meetings. In theory, this should be the heart of the ICA and its ongoing activities. If my experience and some of those I spoke to is anything to go by, quite a few of these meetings were not well attended. As ever there is the conflict of multiple activities at the same time, but Commission meetings seemed to lose out. (There are exceptions and I know that the Commission on Use and User Issues was very well attended with the room at full capacity.) There still remain delegates who are unsure what their purpose is, if they are allowed to attend commission meetings, or if they are closed events.

Two sessions were organised with National Delegates. In the first the ICA Executive

presented their vision of how the ICA should develop in the short to medium term and in the second the National Delegates got the opportunity to provide feedback both on this vision and the organisation of the conference. From a UK perspective, the view is that the Executive is heading in the right direction and trying to achieve appropriate improvements in the organisation and its procedures. Delegates were asked to provide further feedback after the conference, so I hope this has been done and will stimulate lively debate at the next executive meeting.

The venue for the international map exhibition was a very long corridor, which gave an immediate impression of the extent of the exhibition, but was probably not ideal for browsing, or discussing what was on show. Its location did mean that you passed it many times, so you did not feel a need to rush around and try to absorb everything in one visit. Atlases were displayed in an adjacent passageway with attendant security guards, which reduced the pilfering that quickly denuded previous exhibitions of prize exhibits.

"Santiago has quite a different feel – much more that of a modern cosmopolitan Mediterranean city, at least in the downtown area..." | *Photography David Forrest*





Santiago's underground rail system | *Photography David Forrest*

There remain issues about the most appropriate way of dealing with electronic submissions to the exhibition.

There were things that could have been done better – there always are – but these most definitely fell into the ‘minor issue’ category and our Chilean hosts are to be congratulated on a very well organised and enjoyable event. As ever it was great to spend quality time with like minded people, renewing previous acquaintances and making lots of new ones. Roll on Paris 2011 ....

David Forrest | University of Glasgow | *United Kingdom*

## ICA Travel Award Recipients

Seven of the student delegates to the ICC 2009 in Santiago were recipients of travel grants, awarded to encourage attendance and presentations from cartography students and young scientists. The full list and the corresponding paper titles are included below:

- Victoria Molochko, Ukraine, *System of educational geographical atlases in Ukraine*
- Tao Wang, China, *Semantics of contour lines' spatial relation*
- Małgorzata Wiczorek, Poland, *Werenisk-old Glacier (SW Spitsbergen) - morphometric characteristics*
- Rodrigo Mora, Chile, *Retrieving hierarchical information from maps: The role of metric and configurational variables*
- Marcio Schmidt, Brazil, *Expert system to classify semantic information*
- Maria Victoria Alves de Castro, Argentina, *Nitrates pollution at Hurlingham District waters - Spatial analysis with GIS*
- Diallo Ngagne, Senegal, *A diachronic study on the urban growth of Dakar and its impacts*

Unfortunately, Maria Victoria Alves de Castro and Diallo Ngagne couldn't come to Chile and present their work.

David Fairbairn | Secretary General & Treasurer | ICA

## international cartographic exhibition winners

### Globes and atlases

- 1 EARTH, Australia (AUS1): a very impressive and "substantial" piece of work that gives the user a holistic view of the world and ensures that this cartographic masterpiece will not get lost
- 2 Census Atlas of the United States, USA (USA8): varied mapping methods and page layouts

### Digital products (maps and digital images)

- 1 Geografía Universal Interactiva, Chile (CHL14): very intuitive functionality and attractive lay-out & design. Comprehensive geography
- 1 Atlas Nacional de España 1986 - 2008, Spain (ESP15): recognition and completion of 22 years of national atlas publishing on the way to the SIANE web atlas. Bringing together all publications and 3 editions of the national atlas makes comparison possible (also in time)

### Maps and plans of towns and urban areas

- 1 Beijing Olympic Venues, Tourism and Transport Map, China (CHN6): must have answered all geographical questions of visitors of the last Olympics; a perspective, large scale view of the Beijing Olympic venues combines oblique views with cartographic precision and sensitivity
- 2 Diorama Kyoto (Spring), Japan (JPN4): artistic oblique view in Japanese design style

### Maps based on satellite images and remote sensing

- 1 Parc National des Virunga 1:200,000, Belgium / D.R. Congo (BEL7): eye-catching; excellent job on type legibility on an image background
- 2 Cobertura del Suelo 2005 1:10,000,000, Mexico / Canada / USA: very good outcome of multinational co-operation

### Maps for tourism, orienteering and parks

- 1 Turistická Mapa - Set of 6 tourist maps, Slovakia (SVK6): a very clear and impressive large scale map giving the user a perfect impression of the terrain as well as incorporating important touristic features
- 2 Red Sea 1:2,000,000, Hungary (HUN5): well designed outcome of demanding map documentation challenge. Excellent type hierarchy

Circumpolar Region - International Polar Year 2008 (CAN4), winner of the Thematic Maps category | *Photography Aileen Buckley*



New School Maps of Greece (GRC1): Map of South America, winner of the Other Themes category | *Photography Aileen Buckley*

### Hydrographic or maritime navigation charts

- 1 Den Norske Kyst, Værøy-Lofotodden, Chart no. 70, Norway (NOR1): technically well realized with nice representation of coastal landscape and relief. Innovative use of colour for port approaches ensures utility
- 2 Extrait du produit SCAN Littoral des côtes de France, France (FRA3): innovative continuous representation of hydrography and topography, as demonstrated in a spectacular part of the French coast

### Topographic maps

- 1 Cordillera Huayhuash (Perú) 1:50,000, Alpenvereinskarte O/3c, Austria (AUT12): excellent combination of detailed and comprehensive geographic content with artistic impression; yet another impressive piece of "art" from the renown atelier of the Alpine Club Cartography; this detailed map of the Andes Mountains shows the beauty and abundance of topographic mapping at its best
- 2 Carte de Randonnée 4901 Wallis, France / Wallis et Futuna (FRA25): wonderful relief representation; beautiful in its simplicity

### Thematic maps

- 1 Circumpolar Region - International Polar Year 2008, Canada (CAN4): beautiful design: the cartographic representation is very clear and subtle, giving the user a formidable impression of the depicted region; this map utilizes an unconventional format to communicate thematic issues of the polar region; the round map shape reinforces the nature of the information portrayed
- 2 Carte Géologique des Pyrénées à 1:400,000, Spain (ESP25): very good balance of highly saturated thematic information with base reference; dealing very well with multiple categories

### Other (cartography belonging to other themes)

- 1 New School Maps of Greece, Greece (GRC1): "eye-candy" for educational use with multiple views; perfect composition as well as intuitive colouring with impressive terrain accentuation
- 2 Panamap Manhattan, USA: unique method for presenting three themes on a single map

### Public vote

Les Cartes Portolanes, Spain



## International Cartographic Exhibition

As usual, in conjunction with ICC 2009 in Santiago, Chile, an International Cartographic Exhibition was organized. The exhibition was held in the corridors of the conference venue (Escuela Militar) and was, therefore, very accessible and well visited. In total, 34 countries submitted entries to the exhibition. Setting up an exhibition of this size and printing a catalogue before the start of the conference is not an easy job. However, José Compan Rodríguez and his staff of the Local Organizing Committee (LOC) managed to prepare the display areas and print a high quality exhibition catalogue. Regrettably, despite all his efforts (many phone calls to the Chilean Customs at the airport) some entries arrived too late and some not at all.

An international jury had a difficult task to select the best products displayed at the exhibition. However, it received all the support they needed (e.g. from Edwin Hunt of the LOC) for judging the entries. The judgement was based on the following criteria: cartographic design, production method, usability, suitability for use in education and training, as well as innovative, cost effective and unique theme, use or user group. The jury was composed of the following members:

- Corné van Elzakker, The Netherlands (Chair)
- Aileen Buckley, USA
- David Fraser, Australia
- Karel Kriz, Austria
- Takashi Morita, Japan
- Philippe De Maeyer, Belgium
- José Compan Rodríguez, Chile

The jury selected winners and second places in each of the nine categories with the exception of Digital Products category where two entries were announced winners (full list is included on left).

The jury recognizes the overall quality of the exhibition and would like to thank all countries for their participation and José Compan Rodríguez and the LOC for the organization. The jury recommends that the future International Cartographic Exhibitions should be less biased towards displaying traditional static products (mostly paper-based). There are many interactive and multimedia cartographic products that should be showcased at the exhibition as well. Therefore, the jury will formulate some suggestions for exhibiting interactive and dynamic cartography, as well as for digital referencing and archiving.

**Corné van Elzakker** | Chair | International Cartographic Exhibition Jury | *The Netherlands*

## children's map award winners

### Under 9 years old

- ▶ **Dora Sakuntala** | 7 | *Let's Unite in Peaceful Heart* | SD Tarakanita Citra Raya: Banten | Indonesia (ID1)
- ▶ **Landon Parish & Joy Jackson** | 8 | - | Richland Elementary School: Memphis, Tennessee | USA (US4)
- ▶ **Adrienn Papp** | 8 | *Globalization, the New Generation Has Arrived!* | Remetektérvárosi Általános Iskola: Budapest | Hungary (HU4)

### 9–12 years old

- ▶ **Karolina Grzabka** | 11 | *Living in a Global World* | Szkoła Podstawowa w Plewiskach: Plewiska (Poznan) | Poland (PL1)
- ▶ **Beatriz Borroso Gstrein** | 12 | *Globalized World* | Colegio San José: Estepona | Spain (ES5)
- ▶ **Vanessa Giroto Muniz** | 12 | *Internet Brings Knowledge to the World and Makes it Globalized* | Fundação Bradesco: São Paulo | Brazil (BR1)

### 13–15 years old

- ▶ **Alina Vakhitova** | 13 | *Children Should Not Cry for Sorrow* | Detskaya Shkola Iskusstv: Naberezhnye Chelny | Russia (RU5)
- ▶ **Benas Turskis** | 15 | *Entire System* | Rietavas Laurynas Ivinskis G: Rietavas | Lithuania (LT4)
- ▶ **Daniela Karaivanova** | 15 | *The Whole Wide World is Open for Your Dreams* | ELMS Geo Miliev: Burgas | Bulgaria (BG6)

### Public vote

- ▶ **Constanza Soto López** | 12 | *The Related World* | Colegio Unión Latinoamericana: Santiago | Chile (CL3)

**Jury:** Temenoujka Bandrova, Bulgaria (Chair), Jacqueline M Anderson, Canada, Anastasia Christodoulou, Greece, Ana Maria Garra, Argentina, Diah K Kresnawati, Indonesia, Tammy Kwan, Hong Kong, China, Marcela Riveros Lagrèze, Chile and Marcello Martinelli, Brazil

▶ reproduced on the back cover

## orienteering competition winners

The orienteering event took place on Friday, 20 November 2009, at the *Hacienda Santa Martina* estate, comprising 900 hectares of natural landscape located at the foothills of the Andes, north-east from Santiago's metropolitan area.

The competitors ran a circular track of 3.5-5.5km aided with a map and a compass. The competition was organised in three categories, separate for male and female competitors.

The winners in each of the competition categories were:

### Class A male 5.5km circuit

- 1 Julien Gaffuri | France
- 2 Hans Erick Aurell | Sweden
- 3 Dušan Petrovič | Slovenia

### Class B male 4.5km circuit

- 1 László Zentai | Hungary
- 2 Julio Neira | Chile
- 3 Dimos Pantazis | Greece

### Class B female 4.5km circuit

- 1 Melanie Kunz | Switzerland

### 2 Andrea Nass | Germany

### 3 Beatrix Fey | Germany

### Class C male 3.5km circuit

#### 1 Terje Midtbø | Norway

#### 2 Kristoffer Kristiansen | Norway

#### 3 Robert Norheim | USA

### Class C female 3.5km circuit

#### 1 Karin Grånäs | Sweden

#### 2 Marit Varmedal | Norway

#### 3 Astrid Fasold | Germany

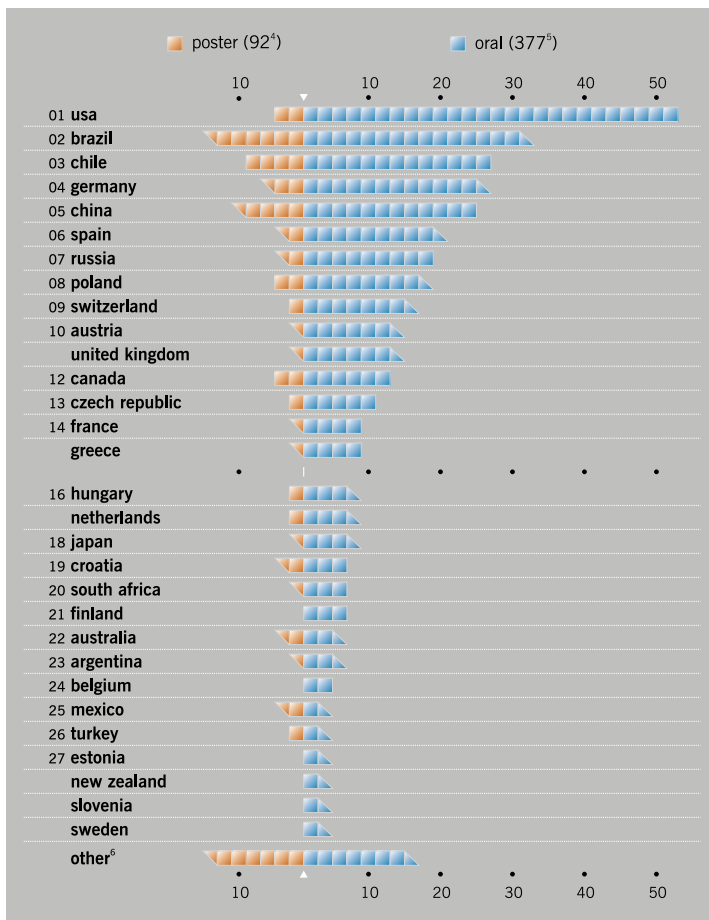
Participants of the orienteering event | *Photography courtesy of László Zentai*



## conference statistics<sup>1</sup>

|   |              |
|---|--------------|
| <b>icc 2009 participants</b>                              | <b>737</b>   |
| full  | 432          |
| senior / student  | 51           |
| one / two days  | 207          |
| accompanying persons                                      | 47           |
| <b>visitors</b>   | <b>1,160</b> |
| <b>commercial exhibitors' personnel</b>                   | <b>344</b>   |
| <b>participants at technical visits</b>                   | <b>170</b>   |
| servicio hidrográfico y oceanográfico de la armada (shoa) | 68           |
| instituto geográfico militar (igm)                        | 43           |
| servicio aerofotogramétrico de la fuerza aérea (saf)      | 29           |
| academia de guerra / ceotac                               | 20           |
| onemi   | 10           |
| <b>meetings</b>   | <b>41</b>    |
| ica commission and working groups                         | 26           |
| executive committee of ica                                | 15           |
| <b>exhibits at international cartographic exhibition</b>  | <b>522</b>   |
| maps  | 430          |
| atlases   | 70           |
| digital products  | 20           |
| globes  | 2            |
| <b>maps at children's map exhibition<sup>2</sup></b>      | <b>160</b>   |

## origin of presentations<sup>3</sup>



<sup>1</sup> Source: Report of the 24th International Cartographic Conference (ICC 2009), Santiago, Chile, prepared by the Military Geographic Institute of Chile, November 2009.

<sup>2</sup> The number of maps listed in the Children's Maps catalogue is 148, however 160 maps were actually displayed at the exhibition.

<sup>3</sup> Source: ICC 2009 Full Program.

<sup>4</sup> The number of poster presentations listed in the ICC 2009 Full Program is 92, while the ICC 2009 Conference Proceedings contain 91 poster abstracts.

<sup>5</sup> 339 oral presentations were actually delivered at the conference.

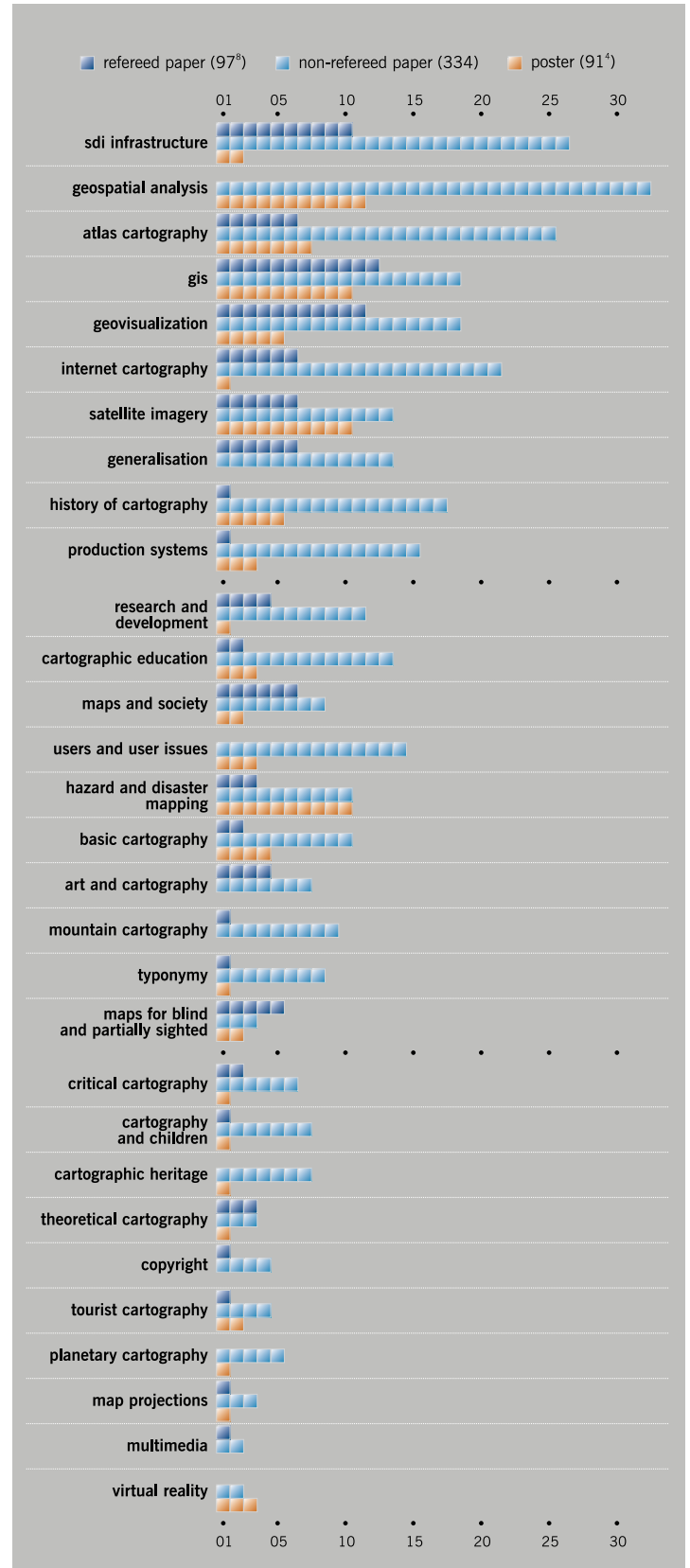
<sup>6</sup> Other countries include Colombia (2 oral / 2 poster presentations), Italy (1/1), United Arab Emirates (1/1), Brunei (1/0), Bulgaria (1/0), Ecuador (1/0), Iran (1/0), Macedonia (1/0), Nigeria (1/0),

Norway (1/0), Romania (1/0), Senegal (1/0), Thailand (1/0), Venezuela (1/0), Taiwan-China (0/2), Tunisia (0/2), Ukraine (0/2), Cuba (0/1), Hong Kong-China (0/1) and Portugal (0/1).

<sup>7</sup> Source: ICC 2009 Conference Proceedings (CD-Rom).

<sup>8</sup> The number of refereed papers has been corrected from 111 to 97, as 14 papers in the *Users and User Issues* theme have been erroneously duplicated to the refereed section.

## published papers and posters<sup>7</sup>





conference in pictures

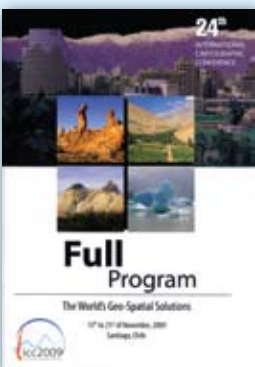
more pictures are available from [www.icc2009.cl](http://www.icc2009.cl)



Photography László Zentai, José Jesús Reyes Nunez, Mátyás Gede and Igor Drecki

conference publications

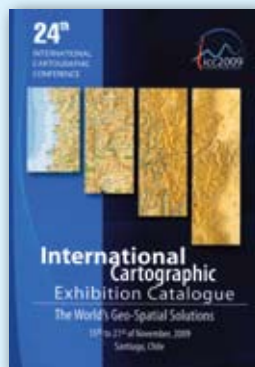
ICC 2009 Children's Map Catalogue



◀ ICC 2009 Full Program



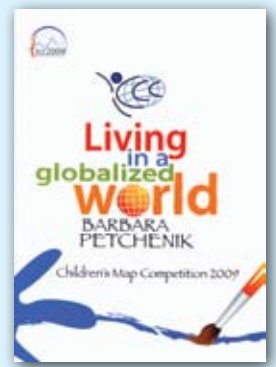
▲ ICC 2009 Conference Proceedings (CD-Rom)



◀ International Cartographic Exhibition Catalogue



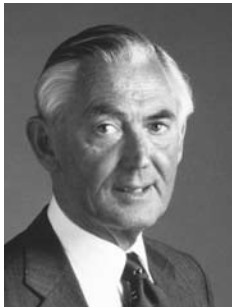
▲ ICC 2009 Exhibitors' Catalogue



# obituaries

## Carl M:son Mannerfelt

10.04.1913 – 10.09.2009



Carl Mannerfelt died in September 2009 at the age of ninety six. Our thoughts are with his wife Ebba, their children and their families. To the International Cartographic Association (ICA) community he is best

known for his work on the establishment of the ICA. Already in the 1940s, as the Director of Cartography at Esselte, he recognised a need to form an international association for cartography where academics and practitioners, national mapping organisations, as well as public and private companies, could meet, exchange professional experiences, discuss current issues and further develop cartographic techniques.

Mannerfelt was born in western Sweden but the family moved to Stockholm where he studied glaciology at the Stockholm University. He finished his doctoral studies in 1945 and his thesis about the final stage of the inland ice regression in Scandinavia is still a classic work. He continued to teach for some years but other activities eventually occupied more of his time. Professionally Mannerfelt worked at Esselte since 1941 as a map editor. He became an assistant director in 1949, head of the Esselte military mapping in 1950 and eventually a board member of Esselte in 1951. In 1958 he became Executive Director (until 1974) and from 1964 to 1983 he chaired the Esselte board of directors. He has also held many board assignments in Swedish companies.

For a long time, Mannerfelt was active in the Swedish Society for Anthropology and Geography (SSAG). Between 1943-52 he was the editor of the SSAG Yearbook (*Ymer*). He was also a board member (1943-83) having various responsibilities such as treasurer, secretary and president. He was also a member of the organisation committee for the IGU congress in Stockholm in 1960. He was a committee member of the Swedish Cartographic Society 1950-60 and its president 1954-60. He organized the Esselte Conference on Applied Cartography in 1956, where he proposed a new initiative to establish an international association of cartographers, later known as the ICA.

Mannerfelt was Vice President of the ICA between 1959 and 1964. In 1979 he proposed to introduce the Carl Mannerfelt Gold Medal, the highest award of the Association, to honour cartographers of outstanding merit who have made significant contributions of an original nature to the field of cartography. The first medal was awarded to Professor Eduard Imhof, the inaugural President of the ICA. At the ICC 1997 in Stockholm he addressed the participants at the opening ceremony with a summary of how ICA was born.

Although cartography was Mannerfelt's main interest he was also a very active in writing papers. Some 300 papers and manuscripts are archived at the Swedish National Archive in Stockholm. Mannerfelt had a deep interest in nature and outdoor activities, especially winter ones. His work for World Wildlife Foundation (WWF) is well known and appreciated. In the 1970s he was very active in extending the conservation work to focus on sustainability in addition to protecting threaten species.

Among friends Carl Mannerfelt was known as Calle. He was always full of idealistic visions

and capable of realising them in a friendly and efficient way. There were several memorial articles written in Swedish newspapers about him. His work for cartography is very much appreciated and valued by the ICA and the Swedish Cartographic Society.

Cartographers all over the world say: *Thank you Calle.*

**Bengt Rystedt** | Former President of ICA (1999-2003)  
| Sweden ●

## Ernő Csáti

05.08.1931 – 19.01.2010



With sadness we are reporting the death of Ernő Csáti, cartographer, former secretary of the Hungarian National Committee for ICA (1964-76 and 1981-93), who passed away on 19 January 2010. He

was seventy nine.

As head of the geocartographic unit of the Hungarian Institute of Geodesy, Cartography and Remote Sensing, he was actively taking part in Eastern European and other international cartographic cooperation projects in the 1970s and 1980s. He was tireless in preparing ICA events in Hungary (especially the ICC 1989, Budapest) and Hungarian participation in meetings of the Association abroad.

**László Zentai** | Hungarian National Committee for ICA  
| Hungary ●

## icc 2011 invitation to paris



France is a host country of the 25th International Cartographic and the 15th General Assembly of the International

Cartographic Association (ICA). The Conference, planned for 3-8 July 2011, will mark the 50th anniversary of the first General Assembly of the Association held in Paris in 1961. During these fifty years, the ICA has skillfully remained true to its two fundamental objectives, namely to maintain its position as an organizer of the benchmark international conferences for cartography and geomatics, thanks to their solid and current scientific content, whilst

remaining open to a variety of participating groups: researchers, professionals, decision-makers in the field of geomatics, teachers, students and lovers of cartography.

The Conference will convene at the Palais des Congrès in Paris and provide the opportunity for a wide range of participants to meet and discuss issues related to cartography and geomatics. The programme will consider wide-ranging issues involving cartography and geomatics, with simultaneous sessions held across eight meeting rooms. In addition to oral presentations, several poster sessions will be organized. The meeting will provide an opportunity to exhibit most recent cartographic products from across the globe including maps and drawings produced by children.

The General Assembly of the ICA, with participation from over eighty member nations, will proceed on 3rd and 8th July 2011. It will consist of a working session on the first day and a session devoted to elections of the new Executive Committee of the Association on the second. The ICA Commissions and Working Groups will meet between these dates to report on their activities and achievements over the last four years, and to propose key working themes for the years ahead.

For more information visit the official ICC 2011 website at [www.icc2011.fr](http://www.icc2011.fr).

**Local Organising Committee for ICC 2011** |  
French Committee of Cartography | France ●



# calendar

## february 2010

02-04: **Gi4DM 2010 Conference** | *Geomatics for Crisis Management* | Torino | Italy | [www.gi4dm-2010.org](http://www.gi4dm-2010.org)  
22-24: **5th International Workshop on Digital Technologies in Cartographic Heritage** | Vienna | Austria | [cartography.tuwien.ac.at/cartoheritage/](http://cartography.tuwien.ac.at/cartoheritage/)

## april

13: **Workshop of ICA Commission on Use and User Issues** | London | United Kingdom | [www.univie.ac.at/cartography/karto/project/ica\\_user/ica\\_user\\_wiki/](http://www.univie.ac.at/cartography/karto/project/ica_user/ica_user_wiki/)

## may

11: **Workshop of ICA Commission on Geovisualisation** | *Geospatial Visual Analytics: Focus on Time* | Guimarães | Portugal | [geanalytics.net/ica/](http://geanalytics.net/ica/)

## june

02-04: **ISPRS Commission VI Mid-Term Symposium** | *Cross-Border Education for Global Geo-information* | Enschede | The Netherlands | [www.itc.nl/isprsc6/symposium2010/](http://www.itc.nl/isprsc6/symposium2010/)  
15-20: **3rd International Conference on Cartography and GIS / ICA Symposium on Cartography for Eastern and Central Europe** | Nessebar | Bulgaria | [www.cartography-gis.com/](http://www.cartography-gis.com/)

## july

03-08: **InterCarto-InterGIS 16** | Rostov-on-Don / Salzburg | Russia / Austria | [www.intercartogis.org](http://www.intercartogis.org)

## september

01-04: **GeoCart'2010 / ICA Symposium on Cartography for Australasia and Oceania** | *Cartographies for Tomorrow: Mapping in a mashed-up world* | Auckland | New Zealand | [www.cartography.org.nz/geocart2010/index.htm](http://www.cartography.org.nz/geocart2010/index.htm)  
01-05: **7th ICA Mountain Cartography Workshop** | *Mountain Mapping and Geospatial Information Retrieval* | Borsa | Romania | [www.mountaincartography.org/activities/workshops/](http://www.mountaincartography.org/activities/workshops/)  
12-13: **Workshop of the Commission on Generalisation and Multiple Representations** | Zurich | Switzerland | [aci.ign.fr/2010\\_zurich/workshop.php](http://aci.ign.fr/2010_zurich/workshop.php)

## november 2010

15-18: **18th AutoCarto 2010** | *Geospatial Data and Geovisualization for the Environments, Security, and Society* | Orlando, Florida | USA | [www.cartogis.org/autocarto/](http://www.cartogis.org/autocarto/)

## july 2011

03-08: **25th International Cartographic Conference** | *Enlightened view on Cartography and GIS* | Paris | France | [www.icc2011.fr](http://www.icc2011.fr)

# ica affiliate members

Organisations, institutions or companies wishing to support the mission and activities of the International Cartographic Association can become affiliate members. The following organisations support the ICA:

**Bundesamt für Kartographie und Geodäsie** | Germany | [www.bkg.bund.de](http://www.bkg.bund.de)  
Attn: Prof Dr D Grünreich, Director | [dietmar.gruenreich@bkg.bund.de](mailto:dietmar.gruenreich@bkg.bund.de)

**Centro Argentino de Cartografía** | Argentina | [www.centroargentinodecartografia.org](http://www.centroargentinodecartografia.org)  
Attn: Prof Carmen Alicia Rey, President | [cac@centroargentinodecartografia.org](mailto:cac@centroargentinodecartografia.org)

**Centro Cartográfica y Fotográfico (CEFAF)** | Spain | [www.ejercitodelaire.mde.es](http://www.ejercitodelaire.mde.es)  
[amatmil@ea.mde.es](mailto:amatmil@ea.mde.es)

**Dubai Municipality** | United Arab Emirates | [www.dm.gov.ae](http://www.dm.gov.ae)

**East View Cartographic** | United States of America | [www.cartographic.com](http://www.cartographic.com)  
Attn: Matthew Tanaka | [matthew.tanaka@cartographic.com](mailto:matthew.tanaka@cartographic.com)

**Eko-Graf Cartographic Publishing House** | Poland | [www.ekograf.pl](http://www.ekograf.pl)

**ESRI** | United States of America | [www.esri.com](http://www.esri.com)  
Attn: Mark Cygan | [mcyan@esri.com](mailto:mcyan@esri.com)

**Geographical Survey Institute** | Japan | [www.gsi.go.jp](http://www.gsi.go.jp)  
[sawa@gsi.go.jp](mailto:sawa@gsi.go.jp)

**Indian National Cartographic Association (INCA)** | India | [www.incaindia.org](http://www.incaindia.org)  
Attn: Shri KC Rout, Secretary General | [routkc@yahoo.com](mailto:routkc@yahoo.com)

**Institut Cartografic de Catalunya** | Spain | [www.icc.es](http://www.icc.es)  
Attn: Jaume Miranda i Canals, Director | [miranda@icc.es](mailto:miranda@icc.es)

**Institut Géographique National** | France | [www.ign.fr](http://www.ign.fr)  
Attn: Mr Jean-Philippe Lagrange, Director | [jean-philippe.lagrange@ign.fr](mailto:jean-philippe.lagrange@ign.fr)

**Instituto Geográfico Nacional España** | Spain | [www.ign.es](http://www.ign.es)  
Attn: Sebastian Mas Mayoral | [smas@mfom.es](mailto:smas@mfom.es)

**Intergraph Corporation: Security, Government and Infrastructure** | United States of America | [www.intergraph.com](http://www.intergraph.com)  
Attn: Vince Smith | [vince.smith@intergraph.com](mailto:vince.smith@intergraph.com)

**International Institute for Geo-Information Science and Earth Observation (ITC)** | The Netherlands | [www.itc.nl](http://www.itc.nl)  
Attn: Corné van Elzakker | [elzakker@itc.nl](mailto:elzakker@itc.nl)

**Land Information New Zealand** | New Zealand | [www.linz.govt.nz](http://www.linz.govt.nz)  
Attn: Geoff Howard | [ghoward@linz.govt.nz](mailto:ghoward@linz.govt.nz)

**Moscow State University of Geodesy and Cartography** | Russia | [www.miigaik.ru](http://www.miigaik.ru)  
Attn: Professor Vasily A Malinnikov, Rector | [lgm@miigaik.ru](mailto:lgm@miigaik.ru)

**National Hydrographic Office** | India | [www.hydrobharat.nic.in](http://www.hydrobharat.nic.in)  
Attn: BR Rao, Chief Hydrographer | [inho@dataone.in](mailto:inho@dataone.in)

**National Land Survey of Finland** | Finland | [www.nls.fi](http://www.nls.fi)  
Attn: Heli Ursin | [heli.ursin@nls.fi](mailto:heli.ursin@nls.fi)

**Navionics Spa** | Italy | [www.navionics.com](http://www.navionics.com)  
Attn: Francesco Pezzana, Managing Director | [pezzana@navionics.it](mailto:pezzana@navionics.it)

**Navteq** | The Netherlands | [www.navteq.com](http://www.navteq.com)  
Attn: Dr Kees Wevers | [kees.wevers@navteq.com](mailto:kees.wevers@navteq.com)

**Ordnance Survey** | United Kingdom | [www.ordnancesurvey.co.uk](http://www.ordnancesurvey.co.uk)  
Attn: Bob Lilley | [blilley@ordnancesurvey.co.uk](mailto:blilley@ordnancesurvey.co.uk)

**Polskie Przedsiębiorstwo Wydawnictw Kartograficznych** | Poland | [www.ppwk.pl](http://www.ppwk.pl)  
Attn: Dr Beata Konopska | [b.konopska@ppwk.pl](mailto:b.konopska@ppwk.pl)

**Rectas** | Nigeria | [www.rectas.org](http://www.rectas.org)  
Attn: Dr Olajide Kufoniyi, Executive Director | [rectas@oauife.edu.ng](mailto:rectas@oauife.edu.ng) or [kufoniyi@skannet.com.ng](mailto:kufoniyi@skannet.com.ng)

**Regional Centre for Mapping of Resources for Development (RCMRD)** | Kenya | [www.rcmrd.org](http://www.rcmrd.org)  
Attn: Dr Hussein O Farah, Director General | [rcmrd@rcmrd.org](mailto:rcmrd@rcmrd.org)

**Star Informatic Publishing Solutions** | Belgium | [www.star.be](http://www.star.be)  
Attn: Paul Duré, Head | [paul.dure@star.be](mailto:paul.dure@star.be)

**Union of Chambers of Turkish Engineers and Architects, Chamber of Surveying and Cadastre Engineers (UCTEA-CSCE)** | Turkey | [www.hkmo.org.tr](http://www.hkmo.org.tr)  
Attn: Prof Dr Necla Ulugtekin, Head of the Commission on Cartography and Geospatial Informatics | [hkmo@hkmo.org.tr](mailto:hkmo@hkmo.org.tr)

**United States Geological Survey** | United States of America | [cegis.usgs.gov](http://cegis.usgs.gov)  
Attn: Lynn Usery | [usery@usgs.gov](mailto:usery@usgs.gov)

**University of Architecture, Civil Engineering and Geodesy, Faculty of Geodesy** | Bulgaria | [www.uacg.bg](http://www.uacg.bg)  
Attn: Dr Temenujka Bandrova | [bandrova\\_fgs@uacg.bg](mailto:bandrova_fgs@uacg.bg)

**University of Balamand** | Lebanon | [www.balamand.edu.lb/english/GIS.asp](http://www.balamand.edu.lb/english/GIS.asp)  
Attn: Prof Oussama Jadayel, GIS Center Academic Director | [info@balamand.edu.lb](mailto:info@balamand.edu.lb)

ICA welcomes new affiliate members; for more information, please contact:

**David Fairbairn** | Secretary General & Treasurer | ICA | [dave.fairbairn@newcastle.ac.uk](mailto:dave.fairbairn@newcastle.ac.uk)



# children's map gallery 2009 winners



Daniela Borislavova Karaivanova  
| 15 | *The Whole Wide World is  
Open for Your Dreams* | ELMS Geo  
Milev: Burgas | Bulgaria

Karolina Grzabka | 11 | *Living in a  
Global World* | Szkoła Podstawowa w  
Plewiskach: Plewiska, Poznań | Poland

Alina Vakhitova | 13 | *Children Should Not  
Cry for Sorrow* | Detskaya Shkola Iskusstv:  
Naberezhnyye Chelny | Russia

Constanza Jaqueline Soto Lopez |  
12 | *The Related World* | Union  
Latinoamericana: Conchali | Chile

Papp Adrienn | 8 | *Globalization, the New  
Generation Has Arrived* | Remetekertvárosi  
Általános Iskola: Budapest | Hungary

