A World of Cartographic Education

The ICA Education Commission reported last year in these pages on educational resources for cartography on the web. The ongoing project of creating material, summarising and presenting links to worldwide initiatives in cartographic education forms part of the commission’s website at 2. Further content includes a regularly updated list of conventional cartographic courses in higher education around the world, and a set of academic papers relevant to education and training.

CARTOGRAPHIC EDUCATION

The Commission has also been active in soliciting reports on cartographic education from a number of institutions. These reveal a picture varying in strength and opportunity, but also reductions and decline in the provision of such education.

In the Netherlands, for example, there is no longer any full course in cartography. There are, however, programmes in geoinformatics, geography, GIS etc, incorporating varying cartography/geodata visualisation content. On the other hand, Germany shows a more promising picture: four schools of higher education offer cartographic education, both the Technical University and the Fachhochschule in Karlsruhe.

In the Netherlands, for example, there is no longer any full course in cartography. There are, however, programmes in geoinformatics, geography, GIS etc, incorporating varying cartography/geodata visualisation content. On the other hand, Germany shows a more promising picture: four schools of higher education offer cartographic education, both the Technical University and the Fachhochschule in Karlsruhe.

Greece has a mixture of focused cartographic courses, at the National Technical University of Athens (School of Rural and Surveying Engineering), the Aristotle University of Thessaloniki (Schools of Rural and Surveying Engineering) and Regional Planning and Development), the Aegaean University (School of Geography), Harokopio University of Athens (School of Geography) and GIS education which includes cartography at, for example, the University of Thessaly (School of Regional Planning and Development). This motley European picture is repeated around the world, as revealed by the list of courses on the Commission’s website.

RESEARCH AGENDA

As well as monitoring such provision the Commission has a number of other responsibilities. Some are related to the ICA’s Research Agenda, which presents a number of issues related to education such as Curriculum on Cartography and GIS Science; Distance Learning; e-Learning, and Virtual Universities; Continuous Learning and Professional Updating; Access to Maps, Internet Datasets and Free Software; and Spatial thinking and Learning. The Commission intends addressing these directly, as well as offering its opinion on a wide range of other Research Agenda topics.

2009 PROGRAMME

All these aspects come under discussion at the regular Commission meetings. Planned events include a symposium in Madrid, Spain from 19th to 22nd April 2009, full participation in the 24th International Cartographic Conference in Santiago de Chile from 15th to 21st November 2009, and contributing to the ITC anniversary educational seminar in the Netherlands in 2010.

The Commission has an ambitious programme of work, to be found under the heading ‘Projects 2007-2010’ on its website. Enquiries about the work of the Commission may be made via the website or chair David Fraser, Department of Geospatial Science, RMIT University, G.P.O. Box 2476V, Melbourne 3001, Australia, email: david.fraser@rmit.edu.au.

MORE INFORMATION

1 http://lazarus.elte.hu/cetJ
2 www.icaci.org
MapServer Workshop in Iran

More than 24 participants attended a recent hands-on Workshop on Contemporary Web-Mapping Technologies in Teheran, Iran. The meeting, held from 20th to 22nd October 2008, was organised by the National Cartographic Center of Iran and the ICA Commission on Maps and the Internet. Representing the latter was co-chair Georg Gartner of the Department of Geoinformation and Cartography, Vienna University of Technology in Austria, and Markus Jobst of the Hasso-Plattner Institute, University of Potsdam, Germany.

WEB MAPPING
There were presentations and hands-on sessions on the subject of ‘Server-side Web Mapping’. The workshop focused on the technological and methodological basics of delivering maps on the web, including such topics as basic tools, design questions, interactive functions and using map-server technology. Based on an introduction to Content Management Systems (CMS) and Application Programming Interfaces (API), participants were then able to install a local map-server. Hands-on sessions dealt with the main components of ‘tuning’ a map-server application, including mapfile and templates. Because map-server applications can be embedded in web map services, there was special focus on interoperability and standardisation in web mapping.

HANDS-ON APPROACH
The workshop was organised and hosted by the National Cartographic Center (NCC), and in particular staff of the Cartography Department, NCC vice-president Babak Shamei, and the ICA delegate Babak Shamei, and the ICA Commission on Maps and the Internet. Invited to give a presentation on server-side Web Mapping. The workshop was organised and hosted by the National Cartographic Center (NCC), and in particular staff of the Cartography Department, NCC vice-president Babak Shamei, and the ICA delegate Babak Shamei, and the ICA Commission on Maps and the Internet. Participants had a variety of backgrounds and skills, but one advantage of hands-on workshops is that they facilitate flexible management of heterogeneous needs. The lecturers and ICA Commission on Maps and the Internet have conducted similar workshops on various topics in contemporary web mapping in many different countries over recent years and are open for suggestions in this context.

TEHERAN UNIVERSITY
ICA vice-president Georg Gartner was invited to give a presentation on contemporary cartographic issues, and to promote the International Cartographic Association at a colloquium at Teheran University. It was interesting to note how well prepared students were, and how remarkably high were their skills and knowledge in the domain of Geoinformation Science. A lively discussion developed on the role and context of Cartography versus Geoinformation Science. It was agreed that there is a need to strengthen contemporary cartographic topics in the syllabi for Geodesy and Geoinformation Bachelor and Master courses at Teheran University.

Georg Gartner, Cartography and Geomedia-techniques, Department of Geoinformation and Cartography, Vienna University of Technology, A-1040 Vienna, Austria

 Participants, organisers and presenters at the Workshop on Internet Cartography (Photo: courtesy Markus Jobst). Markus Jobst in action during a session. (Photo: courtesy Markus Jobst).
The World's Geospatial Solutions

The 24th International Cartographic Conference (ICC) will be held from 15th to 21st November 2009 in Santiago, Chile. Presented by an effective local organising committee (LOC), under the auspices of the International Cartographic Association (ICA), this biennial conference is a major highlight for cartographers from all over the world. Although ICA is proud of its record in reaching out to all parts of the world, this is the first time it has held an ICC in South America, and it promises to be an exciting and significant event.

CONFERENCE ORGANISATION

The President of the LOC, Colonel Juan Vidal Garcia-Huidobro, is the newly appointed director of the Instituto Geografico Militar (IGM), and ICA is grateful to him and his staff at IGM for organising the conference. Already, sub-committees of IGM staff and cartographers from all over Chile are hard at work addressing scientific, communications, exhibitions, social and other aspects of the conference. The conference website is a well-designed and informative gateway to information on the conference. The second call for papers can be viewed, along with a description of the many events that will take place in Santiago in November.

RESEARCH AGENDA

The ICA's scientific research agenda will be addressed with a full range of papers and presentations on every topic related to contemporary cartography. In addition, each of the Commissions and Working Groups (listed on this page), through which the scientific advance of cartography is directed, will have open meetings explaining their remit and progress. The ICA research agenda (which will be published in 2009 as a special paper in the three officially recognised ICA journals) focuses on the role of cartography in society, education and professional practice. All of these topics will be addressed in Santiago.

FURTHER ACTIVITIES

In addition, the usual extensive exhibitions associated with ICA conferences will be present. These include the International Map Exhibition, to which all member nations of ICA contribute. As well as the outstanding display of paper mapping, there will also be facilities to effectively showcase digital map submissions. The customary contribution of hydrographic charts will be present and the biennial cartography competition will also be held. Technical and social visits, along with a range of other activities, including tutorials, workshops, a meeting for national cartographic agencies and an orienteering event, will complement the conference.

MAPPING COMMUNITY

The Executive Committee of ICA, which met in Santiago in November 2008, found it to be an ideal location for our international cartographic conference – travel from Europe, Asia and North America is straightforward, and a cosmopolitan, friendly and accessible city awaits. The presence of the international mapping community will enhance both local cartographic activity and international developments in the vibrant field of cartography.

The main entrance hall of the Escuela Militar, the central location of the ICC 2009.
Talking to Geographers

Since its foundation in 2007, the ICA Commission on Maps and Society has focused its attention on engaging with geographers and targeting the academic geography community to raise awareness of cartographic issues, both practical and conceptual. The last report from this Commission, carried in the pages of *GIM* International/March 2008, introduced the session on 'subversive cartographies' held at the annual meeting of the Association of American Geographers in Boston in April 2008. The Commission also contributed, in August 2008, to the Royal Geographical Society/Institute of British Geographers annual conference in London. There were three well-attended sessions: a conference session on 'Maps as Method', a high-profile evening plenary discussion on the 'Future of the Map', and a rolling PowerPoint presentation on 'Maps that Matter'.

**LIVELY DISCUSSION**

The plenary, chaired by Chris Perkins, chairman of the Maps and Society Commission, resulted in a lively discussion between Mary Spence, chairman of the British Cartographic Society, Ed Parsons, geospatial technologist for Google, and Denis Wood, writer and independent theorist. The discussion sparked an array of questions and comments from the audience, and was also the focus of media interest, with nearly every British national newspaper running a related story (see *The Times* and the *Independent*). Chris Perkins was also interviewed for a follow-up piece in the Times Higher Education Supplement.

**WAYS FORWARD**

The goal of the 'Maps as Method' session was to challenge the inexorable decline in map use by demonstrating the capabilities of geographers and others to work creatively through cartography. The aim was to foster a theoretically informed discussion around the different ways maps have been, are, or could be employed in geographical research, learning and teaching. Papers addressed technological solutions offering innovative ways forward within greatly differing contexts, and confronted taken-for-granted notions concerning the status of mapping practices both within and outside of the academy. The focus shifted from creation of a product to pedagogic progress, different kinds of community engagement, and the methodological and philosophical implications of mapping as method.

Highlights of the session included:
- reworking notions of mental mapping as a practical tool deployed to challenge accepted policy initiatives
- innovative uses of location-based technologies, bringing together narratives of place in the face of top-down urban regeneration
- exploring types of mapping 'mash ups', including community-led initiatives
- evaluation of open-source, volunteered alternatives to conventional mapping databases
- examination of tranquillity mapping as method
- descriptions of web-served historical mapping services.

The Royal Geographical Society, London.

MORE INFORMATION

1. www.timesonline.co.uk/tol/news/uk/article4629602.ece
3. 3 http://mapsthatmatter.blogspot.com
New WG Open Source

ICA undertakes most of its research and investigative work through its Commissions and Working Groups (listed alongside). The Commissions are approved by the ICA General Assembly and address a range of general topics relating to the practice and application of cartography throughout the world and in collaboration with numerous disciplines. The Working Groups (WGs) are approved by the ICA Executive Committee (EC) and are considered more ad hoc in their approach to specific topics on a shorter-term basis. Many Commissions originated as Working Groups.

**HOLISTIC RESEARCH**

The EC has recently approved the establishment of a Working Group on Open Source Geospatial Technologies which aims to promote multi-national holistic research into open-source geospatial technologies so as to make accessible to the wider cartographic community the latest developments in open-source tools.

The WG attempts to enhance usage of open-source geospatial tools among the international cartographic community, especially for education, and it will also promote the use of professional and technical standards (ISO TC 211, OGC) for the development of open-source geospatial software.

**OBJECTIVES**

The Terms of Reference of the WG on Open Source Geospatial Technologies include:

- to organise conferences, workshops and training sessions for open-source geospatial technologies
- to organise special lectures and demonstrations on open-source geospatial technologies
- to make open-source geospatial software more accessible to end users
- to serve as a network for ICA members interested in open-source geospatial technologies via mailing lists, wiki etc.
- to collaborate with other ICA Commissions and Working Groups to promote coordination of different open-source geospatial organisations, such as the Open Source Geospatial Foundation, and developer communities

**ACTIVITIES**

The WG has already embarked on a programme of activities. Chairing the group is Suchith Anand of the University of Nottingham, UK, and co-chair is Prof. Thierry Badard of Laval University, Canada. A WG website has been set up at Laval (see Fig.), which includes instructions on how to join the mailing list. One major activity for 2009 will be active WG participation in the First Open Source GIS UK Conference on 22nd June 2009 at the Centre for Geospatial Science, University of Nottingham (1q2). This conference promises to highlight the rapid progress and fascinating opportunities for geospatial scientists, including cartographers, in the burgeoning world of open-source systems and software development.

Suchith Anand, Centre for Geospatial Science, University of Nottingham
Digital Technologies for Cartographic Heritage

Much progress has been made since the last GIM report (in May 2006) from the ICA group responsible for examining the role of digital technologies in cartographic heritage. Back then the group was officially the ‘ICA Working Group on Digital Technologies in Cartographic Heritage’, with the status of an ad hoc collection of individuals charged with ‘studying the possibilities afforded by modern digital information and communication technologies (ICT) in observing and using our rich cartographic heritage’.

SUCCESSFUL

This group was remarkably successful, and the 23rd ICA General Assembly approved its development into a formal Commission. Terms of reference include supporting the transformation of old maps, globes and cartographic documents into digital form; applying digital techniques in the study of old maps; developing digital tools for assisting the work of map curators and functionality of map libraries, networking and access to cartographic heritage; applying digital support for the preservation and restoration of old maps, atlases and globes; and fostering ICT in teaching and disseminating the history of cartography and maps to the public.

OVERLAP

It thus has significant overlap with other geomatics disciplines outside cartography, and its work has contributed to and is itself influenced by photogrammetrists, architects, historians, archaeologists, geodesists, archivists and vision scientists. The Commission’s website indicates the wide-ranging activities undertaken by the group under the dynamic leadership of Professor Evangelos Livieratos from the Department of Cadastre, Photogrammetry and Cartography at Aristotle University in Thessaloniki.

ANNUAL MEETINGS

The work of the Commission has included successful annual meetings in Thessaloniki, Athens, Barcelona, and, most recently, Venice. Topics addressed have included both general overviews of technologies and methods for presenting map documents, methods and applied tasks. Alongside these meetings, the work of the Commission stands recorded in an eminent online, refereed journal, e-Perimetron (See: ‘The Petr Ivanovich Sevastianov’s 19th century Holy Mt Athos plans, embedded in a modern digital 3-D local cartographic environment’ by Ploutoglou, Pazarli and Boutoura), methods for utilising heritage sources (e.g. ‘Some efforts for re-mapping the area and securing the available documented articles affected by tsunami in Aceh, Indonesia’ by Martha and Utomo) and specific tasks to which such approaches can make a valuable contribution (e.g. Gaspar’s ‘Dead reckoning and magnetic declination: unveiling the mystery of portolan charts!’).

This Commission has a significant agenda to address and is taking a wide-ranging view of its subject matter, with positive results.
ICA Research Agenda

ICA has a special role as a promoter of the development of Cartography and Geographic Information Science. ICA research and development aim to create theory and methods for cartography and GIS handling. By applying these theories and methods to various applications, new practical tools can be created. Such topics are addressed at the main ICA work forums, its Commissions. A coherent direction for Commission activity, in the form of a definitive Research Agenda, has been developed over the past few years and is being published in full in the three ICA-recognised journals (The Cartographic Journal, CAGIS, and Cartograhical) during 2009.

MIND MAPS

The scope of the Research Agenda is broad. All Commissions were consulted through a series of brainstorming exercises which resulted in ‘Mind Maps’. From which the main headings could be extracted. The main subjects addressed are 1) Geographic Information (GI); 2) Metadata and SDIs; 3) Geospatial Analysis and Modelling; 4) Usability; 5) Geovisualisation, Visual Analytics; 6) Map Production, 7) Cartographic Theory; 8) History of Cartography and GI Science; 9) Education; and 10) Society.

SUB-TOPICS

The agenda documents current research activity in each of these fields, suggests areas where more intensive or renewed effort is required, and discusses methods by which some of this research can be undertaken in ICA Commissions, through international collaboration with sister societies, and under suggested programmes of integrated research stimulated by this summary.

Each field has an associated and extensive listing of sub-topics.

RESPONSIBILITIES

It is intended that the research agenda be reflected upon by the ICA Commissions. One major responsibility of the elected Commission chairs is to develop a ‘Terms of Reference’ document explicitly listing the deliverables expected over the four-year period of its existence (Commissions can be re-elected). Such deliverables should yield valid research results and a further duty of a Commission chair is to invite and manage a group of expert and interested individuals to achieve these. The work programme may be completed through focused research meetings and conferences, both during and around biennial International Cartographic Conferences or at other times, through ongoing intra-Commission communications, and through collaboration with sister societies. Alternatively, it is hoped that the agenda might be positively employed by individuals submitting proposals for funding to regional, national, and international organisations.

BENEFITS

In all cases, ICA expects the results of research to be widely disseminated for the benefit of itself, the wider cartographic community and society in general. The presentation of a Commission report is required at each quadrennial ICA General (Delegate) Assembly, and opportunities exist for the presentation of research findings in the conference arena. Publication of research work in academic and scientific journals would also be expected, along with more informal communication through Commission websites.

The Research Agenda, as a public document, also shows the face of ICA to the rest of the scientific community. It is hoped that progress in geomatics will result from this initiative.

More information:
1 www.icaci.org
Disseminating Cartography

ICA takes its worldwide remit seriously: the executive committee has representatives from every continent; the newsletter is an excellent publication, sent by post across the globe and accessible online; the ICA website extends our reach to all cartographers and interested people worldwide, biannual International Cartographic Conferences take place in exciting international locations (please join us in Santiago de Chile this November, see ICA website for details).

PROMOTING OURSELVES

Commissions and Working Group meetings in 2009 have been held in venues from Prague to Bishkek, from Nottingham to Tehran, from Venice to Gavle, and from Chengdu to Gent (and most will also meet in Santiago). GIM International magazine promotes ICA to its international readership every month, and our affiliate members make their living from cartographic activities everywhere.

ONLINE PROCEEDINGS

A recent method of showing the world the importance of our activities is the hosting of past Proceedings of International Cartographic Conferences on the ICA website. Visiting the Publications section of the website is a 'Map of the Month' feature. It is hoped that the availability of these documents in online electronic form will raise the profile of ICA within the scientific community.

MAP OF THE MONTH

Another innovation soon to reach the website is a 'Map of the Month' feature. We hope initially to receive submissions for this from ICA affiliate members. The intention is to display high-quality cartographic images, submitted as a PDF or high-resolution scanned image, with a few accompanying notes about the map and its creator(s). Such a feature will further enhance the important role of the website in mirroring cartographic activity worldwide. Affiliate members are encouraged to submit their work through the Contact section on the home page.

Cartographers are an internationally aware group of professionals: many will travel to the 24th International Cartographic Conference in Santiago in November to show just how international they are.

Proceedings of past International Cartographic Conferences, now on the ICA website.
An Affair to Remember

The International Cartographic Association (ICA) celebrated its fiftieth anniversary with a two-day event in Bern, Switzerland from 9th to 10th June 2009. The event brought together members, associates and friends from the ICA international community.

The event was hosted by swisstopo and the Swiss Cartographic Society. In addition, the Institute for Cartography at the Swiss Federal Institute of Technology (ETH Zurich) provided a wonderful display of the cartographic work of Eduard Imhof, the first president of ICA.

PAST

The first day of conference papers looked back on ICA efforts to further its aims over the last fifty years. Dr Walter Imhof, for instance, gave a presentation on a 1981 TV Film about Prof. Eduard Imhof. Professor Bengt Rystedt discussed the road towards ICA and the contribution of Carl Mannefelt. Professor Ernst Spiess gave a speech on ICA efforts in Map Design and Production. And Professor Lorenz Hurni spoke about Swiss Cartography in the twentieth century.

FUTURE

The presentations on the second day looked towards the future. Professor Dietmar Grunreich, for example, gave a presentation on SDIs at national, European and global level. Dr Anne Ruas spoke about research into data integration. Professor Menno-Jan Kraak discussed the ICA research agenda. And Professor Evangelos Liveratos addressed digital technologies in cartographic heritage.

ORGANISATION

On the evening of 9th June a celebratory dinner was held at The Casino in Bern. ICA vice-president Dr Anne Ruas prepared the programme and organised the panel of speakers. Secretary-general/treasurer David Fairbairn was the brain behind the logistics of making the event ‘work’.

FORMER PRESIDENTS

A number of former ICA presidents were able to attend, among them Professor Fraser Taylor, Dr Michael Wood OBE, Professor Bengt Rystedt and Professor Milan Konecny. Former president Professor Joel Sideris (lAG president), Professor Bruno Messenger (IGU) and Dr Jarmo Rata (GSDI). Greetings were received from other sister societies – FIG, IHO and IMTA.

For the International Cartographic Association, the ICA Executive Committee, the ICA community and its associates and friends, this celebration was certainly ‘an affair to remember’. Further details of some presentations will be communicated in next month’s GIM International.

Professor William Cartwright, president, International Cartographic Association
Celebrating the Founding Fathers

Last month's ICA column reported on the association's 50th birthday celebrations, held in June 2009 at swisstopo in Wabern, Switzerland. International cartography representatives gathered to remember the founding fathers of ICA and consider the future of the discipline.

FOUNDING FATHERS

Two names consistently dominate the story of the establishment of ICA in the 1950s: Professor Carl Mannerfelt of Sweden and Professor Eduard Imhof of Switzerland. The anniversary celebration meeting was delighted to hear from two speakers intimately connected with these founding fathers: greetings were conveyed from 96-year-old Mannerfelt by Bengt Rystedt, an eminent Swedish cartographer and previous ICA president, whilst Walter Imhof, son of Eduard, gave a personal recollection of his father.

INFLUENTIAL GROUP

Walter Imhof explained how the lure of mountain hikes around his birthplace in Schiers (Canton of Grisons) led to a flowering of his father’s artistic skills and a determination to become a topographer. Eduard Imhof graduated from ETH Zurich as a surveying engineer in 1919 and spent almost all his professional life conviced of the need for a special cartography. Imhof was appointed head of cartography at Esselte in Stockholm — Mannerfelt was delighted to hear from two speakers intimately connected with these founding fathers: greetings were conveyed from 96-year-old Mannerfelt by Bengt Rystedt, an eminent Swedish cartographer and previous ICA president, whilst Walter Imhof, son of Eduard, gave a personal recollection of his father.

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Walter Imhof with Professor Ernst Spiess, his father's successor as director of the ETH Zurich Institute of Cartography and was confirmed by election of the first General Assembly of delegates to the ICA in Paris in 1961.

SPECIAL ORGANISATION

In fact the Committee of Six had been set up somewhat earlier, following an initiative by Professor Mannerfelt. From a commercial map publishing background — he was head of cartography at Esselte in Stockholm — Mannerfelt was convinced of the need for a special organisation to discuss cartographic issues when he attended the Congress of Printing and Allied Industries in Venice in 1954. In the summer of 1956 he was able to invite 35 cartographers from different countries to the Esselte Conference on Applied Cartography. At the final session of the conference a motion was discussed “to form an International Organisation of Applied Cartography”. Mannerfelt directed further discussions at meetings in Bern in 1957 and Chicago in 1958, before the Mainz meeting in November of that year.

COMMITTED INDIVIDUALS

Between them these two European cartographers of differing background and experience led a group of committed individuals to create a confident and effective organisation; not a sub-group of another body (there had been suggestions that the rightful place of cartography was in a subcommission of the International Geographical Union). It was delighted to return to its birthplace to celebrate fifty years of success, and to look forward.

Walter Imhof with Professor Ernst Spiess, his father's successor as director of the ETH Zurich Institute of Cartography and was confirmed by election of the first General Assembly of delegates to the ICA in Paris in 1961.

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Orientating ICA

The original meaning of the term 'orientating' a map was to rotate it to show east (the 'orient') at the top, in much the same way as most map-users today align their world maps to the north to ensure familiarity with their world-view. From the Western European perspective, that of this regular columnist, 'east' could be defined to include all points from the longitude of Hamburg to that of Tokyo. Several ICA commissions and working groups have a natural affinity with Eastern Europe due to the presence of their chairs and active members, and this part of the world has proved fertile ground for cartographic activity and development over many decades. And although the month in which you read this column sees ICA meeting in Venice (Q4) for an advanced overview of contemporary technologies in the important area of cartographic and geographic visualisation, whilst April saw another ICA Commission, on Digital Technologies for Cartographic Heritage, present their 4th annual meeting in Venice (Q4).

EARLY WARNING

This year opened with a gathering of experts in the fields of risk planning and disaster management. The ICA Working Group 'Cartography of Early Warning and Crisis Management', under the leadership of ICA past-president Prof. Milan Konecny, met in January in Prague (Q1) to address the state of the art in early warning and emergency management and to review tools, software, existing geo-information sources, organisational structures and methods for work in crisis situations.

REGIONAL SYMPOSIUM

The following month saw the first officially sanctioned ICA Regional Symposium on Cartography for Eastern and Central Europe, organised by ICA vice-president Georg Gartner and a committee of cartographers from Estonia, Russia, Poland, Bulgaria, Lithuania, Germany, Austria, Slovakia, Switzerland, Croatia, the Czech Republic, Greece, Serbia, Slovenia, Latvia, Turkey and Hungary (Q2).

ICA COMMISSIONS

The ICA Commission on Geovisualisation met in Hamburg in March 2009 (Q3) for an advanced overview of contemporary technologies in the important area of cartographic and geographic visualisation, whilst April saw another ICA Commission, on Digital Technologies for Cartographic Heritage, present their 4th annual meeting in Venice (Q4).

WORKING GROUPS

Late June marked an opportunity for Russian cartography, in the person of Professor Vladimir Tikunov, chair of ICA Working Group on GIS and Sustainable Development, to organise for the fifteenth time the valuable InterCarto/InterGIS conference (Q5), this year in Perm. Early August saw the presentation of the 3rd ICA Workshop on Geospatial Analysis and Modelling in Gavle, Sweden (Q6) under the guidance of ICA Commission chair Professor Bin Jiang, whilst later in the month the First International Conference on 3D Maps (Q7) was held in Dresden, organised by Manfred Buchroither. A report of the activities of the ICA Commission on Theoretical Cartography in Ukraine, Germany and Lithuania during 2009 will be published next month on this page. Eastern Europe has certainly featured prominently on the ICA map in 2009!
Practical Expression

Last month we presented some of the ways in which Eastern Europe has found itself on the ‘cartographic map’ during 2009. The range of meetings and events has once more demonstrated the vital role of cartographic activity in this dynamic part of the world.

From an ICA perspective, a number of Commissions and Working Groups are led from Eastern European bases, although of course, as with all Commissions and Working Groups, the remit is completely international. Eleven of the groups listed on the left have chairs resident in this area (if one can be elastic and include Sweden and Greece!)

The ICA Commission on Theoretical Cartography, led by Alexander Wolotschanko of Dresden, has always been of great significance to the organisation. The current widening gap between cartographic opportunities and theory was a major stimulus for the creation of the ICA Research Agenda (described in GIM International July 2009). The major topics under the heading ‘Theory’ in the research agenda include Conceptual Analysis of Maps and Cartography, Structural Models of Cartography, The Map Artefact as a Concept, Cartographic Design Principles, Cartosemiotics, Map Semantics, Map Syntactics, Map Semantics, Geospatial Knowledge, Cartographic Ontology, and Terminology. The current Commission on Theoretical Cartography is particularly active in cartosemiotics, but also addresses other areas of map language, cognitive processes, and toponymy.

In March 2009 the Commission held a joint seminar with the National Aviation University (NAU), Institute of Airports and Environment in Kyiv, Ukraine, entitled ‘Cartography, Cartosemiotics and Ecological Safety’. The full-day meeting was organised in conjunction with O. Zaponozhet, director of the Institute. A few weeks later a workshop entitled ‘Cartography at the Cross-roads’ was held in Barnaul, Russia, at the Institute for Water and Ecological Problems, Siberian Branch. Presentations from Austria, Germany and Russia addressed both general cartographic issues and specific cartosemiotic topics. Commission members Irina Rotanova and Alexander Koshkarev joined the chair in organising this event, which was followed by a roundtable session ‘Quo vadis modern cartography?’ at the 5th International Congress Geodesy-Siberia 2009 in Novosibirsk in April 2009. Contributors from the Czech Republic, Russia, Israel and Germany gave their views on the conceptual future of cartography.

In co-operation with the Centre for Cartography of Vilnius University and the Lithuanian Cartographic Society, the Commission held its 5th Seminar on Cartosemiotics in May in Lithuanian Museum of Ethnocosmology, Moletai, Lithuania.