

president's corner



Dear Colleagues

2022 was a busy and productive year for the ICA. Important decisions were made to secure and benefit the ICA as an international society. Several ICA events took place along

with preparations that are well underway for the next ICA General Assembly (GA) and the 31st International Cartographic Conference (ICC) in Cape Town, South Africa. The ICA Executive Committee (EC) met several times to advance the society as an international organization and to strengthen the cartographic and GIScience program.

In recent years, international banking rules have become more strict, particularly for organizations such as ours with a large number of diverse member countries. In 2022, we were notified that our current banking relationship would close. As we sought a new banking arrangement, additional challenges were encountered such as a documented location of the ICA as an organization. Previously, the ICA has had a "seat" but no permanent address. This was of significant concern to me and especially to Thomas Schulz, the ICA Secretary General and Treasurer, for several reasons, including banking requirements. Without a fiscal means to operate the ICA as an organization, we were faced with difficult burdens that needed timely resolution. Thomas worked on

> 02

in this issue

president's corner :: 01

31st international cartographic conference 2023 :: 01

from the editor :: 02

ica news

ica executive committee :: 04

ica news contributions :: 04

children's map awards 2023 :: 05

ica news – reserve your copies! :: 06

icc 2025 :: 05

profiles

jess hepburn :: 06

reports

ica commissions :: 07

ica working groups :: 11

cartographic meetings and events :: 12

obituary :: 10

calendar :: 22

ica affiliate members :: 23

children's map gallery :: 24

31st international cartographic conference 2023 cape town



Call for abstracts and papers

The International Cartographic Association (ICA) invites you to share your research, practice and experiences in cartography and GIScience at the 31st International Cartographic Conference (ICC 2023), to be held from 13 to 18 August 2023 in Cape Town, South Africa.

Submissions of abstracts (1-2 pages) and full papers (8 pages) in English are accepted, following the respective ICA templates. Abstracts and full papers will be peer reviewed by a minimum of two experts in the field against the following criteria: scientific originality, potential interest to the community, proper documentation of prior work, clarity of presentation, technical correctness and correct use of language. Authors of accepted abstracts and papers will be invited to present their work in English at the ICC 2023, either as oral presentation or as poster.

> 03

Cape Town at dusk | Image The Nature Conservancy
(www.nature.org) ▼



I am looking forward to my upcoming trip to Europe to visit friends and family. Travelling from New Zealand, it is not a trivial proposition however, taking around 24 hours of flying time alone (via the United States) and coming with a substantial price tag (even when flying economy). This time I am visiting for just over six weeks, which makes the effort worthwhile. While in Europe, I am planning to attend the ICA Spring Olomouc 2023 seminar at the beginning of April and catch up with cartographic friends I have not seen since ICC 2019 in Tokyo!

Yes, over three eventful years have passed since cartographers from this part of the world have been able to connect with their peers in Europe, Asia or North America. No doubt the global pandemic and lockdowns played a major role in causing this situation, but are not the only cause... Geography is not our ally when it comes to joining cartographic meetings and events, the majority of which take place in the Northern Hemisphere. Making the journey for anything less than five to seven days in duration makes little economic sense, leaving the International Cartographic Conferences as the only viable option. Of course, some of us, like me, are planning their personal travels around cartographic meetings of their interest, but generally, we are not able to experience the intensity of these gatherings as enjoyed by our 'northern' colleagues.

I am not complaining however, simply alerting to the fact that despite our best efforts and hunger for in-person meetings, we are often not able to participate. Please do not forget about your Southern Hemisphere colleagues who, like you, share the same passion for cartography and would love to see you 'down under'.

In this issue of *ICA News*, we are updated on the ICC 2023 preparations by our South African colleagues and celebrate the life of Lynn Usero who passed away last year. We are invited to Vancouver in 2025 and briefed on a number of cartographic meetings and events that took place around the world. Many thanks for your support!

Igor Drecki | Editor ICA News | ICA ■

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

President: **Tim Trainor** | *United States of America*

Secretary General & Treasurer: **Thomas Schulz** | *Swiss Federal Statistical Office | Switzerland*

Editor ICA News: **Igor Drecki** | *National Library of New Zealand | New Zealand*

© **International Cartographic Association (ICA) 2022**

this unexpected challenge for many months to familiarize himself with the details so that we could find a solution that would work, not only as a stop-gap measure to ensure the financial operation of the ICA, but more importantly, to provide a long-term solution. I am pleased to share that our Secretary General and Treasurer worked through a solution that is most beneficial to the ICA, the specific details of which we will share with members of the General Assembly in August in Cape Town. The ICA has a bank and a new country location, both located in Switzerland, the original home of the ICA in 1959. More actions are needed to further secure the ICA as an international institution, and I am very confident that the ICA Executive Committee will continue to provide the necessary leadership in supporting these decisions. While this topic is very far from most of our interests in cartography and GIScience, I am certain that you share our common goal of maintaining the ICA as a viable institution.

During this year, the ICA EC met five times, two meetings were virtual over two days and the other meetings were in-person. Our virtual meeting in February focused on reactions from Florence, as this was ICA's first hybrid International Cartographic Conference. The ICC 2021 was our first in-person event during the pandemic. The EC confirmed that the Florence conference was an important success in our journey toward more normal times. The EC also approved initiating work on a new topic on ethics in cartography. The second meeting of the year took place in Madrid, Spain in advance of an ICA Joint Commission Workshop on Atlases, Map Design, and Toponymy. During this meeting, the EC conducted a comprehensive review of each ICA Commission in preparation for a meeting of Commission and Working Group Chairs that took place later in the year in September. In August, the EC met in Cape Town, South Africa to conduct a site visit for the next General Assembly and 31st ICC. We were warmly welcomed by the Local Organizing Committee (LOC), and we experienced Cape Town's attractive destination. In addition to the site visit, one principal focus of this EC meeting was to conduct a thorough review of the ICA Statutes. It is important to periodically review our governing statutes to ensure they are relevant to our circumstances. Events such as the banking situation, the pandemic and the war in Ukraine uncovered various gaps in the ICA Statutes that affect the operating order of the ICA. These ideas are being shared with the ICA Statutes and By-Laws Committee which will make final recommendations on suggested changes. We will communicate with our national members in advance of the GA in Cape Town so appropriate support can be considered. The fourth meeting of the EC took place in Vienna in advance of EuroCarto in September. One agenda topic included preparations for a meeting with Commission and Working Group Chairs prior to EuroCarto. Interest in continuing in their leadership role or plans for chair

succession was a focus of the meeting in order to continue the important and collaborative work in cartography and GIScience. The Chairs were reminded of the approval procedures needed in advance of and during the GA. The EC encouraged the Commissions and Working Groups to take advantage of the remaining time in this term for accomplishing their Terms of Reference.

In-person cartographic conferences and meetings are a mainstay of the ICA and were increasingly organized in 2022. In April, I was invited by the UK Ordnance Survey to participate in the Cambridge Conference where I represented the ICA among chief executives from many national mapping and national geospatial agencies. The ICA Joint Commission Workshop in Madrid was a special event where the National Geographic Institute of Spain celebrated its 150th anniversary which was delayed from two years earlier due to the pandemic. The Geospatial World Forum in Amsterdam brought together leaders from business, government, academia, and the professional societies. The ICA contributed to the program in several ways including a presentation at a Geospatial Knowledge Infrastructure workshop, convening a session by the ICA Working Group on Sustainable Development and moderating sessions of national mapping agencies by our Secretary General, Thomas Schulz. The 8th International Conference on Cartography and GIS took place in June in Bulgaria. Several ICA commissions participated in the event. EuroCarto followed in September with a very strong program and international presence, including the ICA's Commissions and Working Groups. From Vienna, I travelled to Lasko and Velenje, Slovenia at the invitation of the Surveying and Mapping Authority of the Republic of Slovenia for a plenary lecture during their 50th Slovenian Land Surveying Day in association with the 14th Regional Conference on Cadastre and Spatial Data Infrastructure as well as an address to the West Balkan National Mapping and Cadastre Agencies. The last major event for 2022 was the AutoCarto 2022 Regional Cartographic Conference in Redlands California. Vice Presidents Liqiu Meng and Terje Midtbø participated in the conference. Liqiu delivered a keynote entitled *Ethics in Mapping - Integrity* at the event. Thomas Schulz and I made presentations and welcomed ICA scholarship winners who advanced their knowledge of cartography and GIScience and professional relationships during the event. The Cape Town ICC 2023 was prominently displayed at AutoCarto and promoted by Slindi Mhlongo from the LOC.

Approval of a new Working Group on Ethics in Cartography followed after a special international panel discussion during the ICC 2021 in Florence. In 2022, ICA-sponsored sessions on ethics in cartography took place at five events (American Association of Geographers, International Map Industry Association, Esri User Conference, EuroCarto, and Auto-

president's corner cont...

Carto). While there was a common theme, each session had a unique focus with different professionals participating on the panels. It is important that the ICA continue this work approved by the EC.

The United Nations also convened different meetings and events in 2022 in which the ICA played a prominent role. The first in-person meeting of the High-Level Group of the UN Integrated Geospatial Information Framework (HLG-IGIF) met in New York to advance their future work plans (ggim.un.org/UNGGIM-HLG-IGIF/) where the ICA plays a strategic advisory role. After two years of virtual meetings, the Committee of Experts on Global Geospatial Information Management (UN-GGIM) met in New York in August for their 12th session. The immediate past president, Menno-Jan Kraak and I participated in this session and promoted the ICA and UN publication *Mapping for a Sustainable World* while past president, Georg Gartner represented the Academic Thematic Network. Another UN event, the 2nd UN World Geospatial Information Congress (2nd UNW-GIC), was organized in Hyderabad, India in October 2022 (ggim.un.org/2unwgic/). As president of the ICA, I was invited as a member of the International Advisory Committee (IAC) and was selected by the Committee to serve as

the Conference Chair. The ICA was prominently on display in the Exhibition Hall that also included displays for the ICC 2023 in Cape Town which was staffed by Janusha Singh from the ICC Local Organizing Committee. Several ICA national and affiliate members were present as well as Past President Georg Gartner representing the Academic Network of the UN-GGIM.

ICA publications continue reflecting interest, scholarship, and frequency on cartographic and GIScience themes. In future ICA News, we look forward to hearing from more Commissions and Working Groups about your activities and events. During 2022, the number of student scholarships continued to blossom, which is one of the hallmarks of this term. Lastly, in looking toward the future, the EC approved a proposal from Canada to host the International Cartographic Conference in Vancouver, Canada from 28 July to 1 August 2025. Please mark your calendars. There will be more on plans for ICC 2025 in the future. From Europe in 2021 to Africa in 2023 to the Americas in 2025, the International Cartographic Association is making its mark on the globe!

Tim Trainor | President | ICA ■

31st international cartographic conference 2023 cape town cont...

The presenting author must register for the conference. Accompanying persons, who are registered for the conference, will receive one complementary entry to one technical session of their choice, such as to support a speaker when delivering their presentation. Submit your abstract or paper at easychair.org/conferences/?conf=icc2023.

Conference publications

ICC 2023 publications follow the ICA publication regulations. Accepted abstracts and papers that have been revised to address reviewer comments will be published in one of the ICA publications: **Abstracts of the ICA**, **Proceedings of the ICA**, **Advances of the ICA** or the **International Journal of Cartography**.

Authors of accepted abstracts have the option to expand their abstract into a full paper of 8 pages for publication in the *Proceedings of the ICA*. If they opt not to do this, their abstract will be published in the *Abstracts of the ICA*. Full papers are accepted for publication in the *Proceedings of the ICA* or in the *Advances of the ICA*. Selected papers accepted for the *Advances* will be invited to submit their papers to the *International Journal of Cartography*, for inclusion in a special issue.

On submission, authors will be able to indicate whether they would like their abstracts and papers to be considered for a special issue in one of the ICA's three affiliated journals. Following the submission of revisions, editors of the affiliated journals will invite authors of selected abstracts and papers with the potential to be developed into a full journal paper to submit a substantially revised and/or expanded paper to a special issue in their journal, to be published in 2024:

- **Cartographica** is an international and interdisciplinary peer-reviewed journal that publishes transformative research, education, and practice contributions to the social, political, technological, and historical aspects of cartography. *Cartographica* provides a forum for the exchange of original perspectives and innovative findings in the production, design, use, cognitive understanding, and novel applications of maps in arts, cartography, computer science, economy, engineering, geography, history, medicine, health, and surveying.
- **Cartography and Geographic Information Science (CaGIS)** is the official publication of the Cartography and Geographic Information Society. The Society supports research, education, and practices that improve the understanding, creation, analysis, and use of maps and geographic information. The *CaGIS*

ICC 2023 Conference Themes

Art and Cartography
Atlases
Augmented, virtual and mixed reality in cartography
Beyond SDIs towards the future geospatial ecosystem
Cartographic heritage into the digital
Cartography and children
Cartography and GIScience for climate change
Cartography in early warning and crisis management
Cognitive issues in geographic information visualization
Crowdsourcing in cartography and GIScience
Earth Observation and cartography
Education and training
Ethical issues in cartography and GIScience
Generalisation and multiple representation
Geospatial analysis and modelling
Geospatial data, analysis and mapping for SDGs
Geospatial data, analysis and mapping for service delivery
Geospatial data hubs for SDGs
Geospatial semantics
History of cartography
Informal settlement mapping
Location-based services
Map design
Mapping Africa for Africa
Map production and geoinformation management
Map projections
Maps and graphics for blind and partially sighted people
Maps and the Internet
Maps for sport and leisure activities, such as trekking cycling and orienteering
Marine cartography
Military cartography
Mountain cartography
Open data for cartography and GIScience
Open science in cartography and GIScience
Open source geospatial technologies
Participatory mapping
Planetary cartography
SDI and standards
Sensor-driven mapping
Standardization in cartography
Theoretical cartography
Topographic mapping
Toponymy
Ubiquitous mapping
UN GGIM IGIF implementations
User experience
Visual analytics

President

Tim Trainor | United States of America

Secretary General & Treasurer

Thomas Schulz | Swiss Federal
Statistical Office | Switzerland

Vice Presidents

Andrés Arístegui | Instituto Geográfico
Nacional España | Spain

Temenoujka Bandrova | University of
Architecture, Civil Engineering and
Geodesy | Bulgaria

Philippe De Maeyer | Universiteit Gent |
Belgium

Liqiu Meng | Technische Universität
München | Germany

Terje Midtbø | Norges Teknisk-
Naturvitenskapelige Universitet | Norway

Vít Voženílek | Univerzita Palackého v
Olomouci | Czech Republic

László Zentai | Eötvös Loránd University
| Hungary

Past President

Menno-Jan Kraak | University of Twente
| The Netherlands

Editor ICA News

Igor Drecki | National Library of
New Zealand | New Zealand

ica news
contributions

Please send your contributions to

Igor Drecki | Editor ICA News |
idre002@aucklanduni.ac.nz

Postal Address

Alexander Turnbull Library
National Library of New Zealand |
Te Puna Mātauranga o Aotearoa
PO Box 12349
Wellington 6144
New Zealand

Submission Deadlines

15 May for June editions

15 November for December editions

31st international cartographic
conference 2023 cape town cont...

journal implements the objectives of the Society by publishing authoritative peer-reviewed articles that report on innovative research in cartography and geographic information science.

- *The Cartographic Journal* is an established peer reviewed journal of record and comment containing authoritative articles and international papers on all aspects of cartography, the science and technology of presenting, communicating and analysing spatial relationships by means of maps and other geographical representations of the Earth's surface. This includes coverage of related technologies where appropriate, for example, remote sensing, geographical information systems (GIS), the internet and global positioning systems. The Journal also publishes articles on social, political and historical aspects of cartography.

For any queries or more information, please contact the Scientific Committee at scientific-committee@icc2023.org or visit icc2023.org.

Serena Coetzee | Chair | ICC 2023 Scientific Committee | South Africa

ICC 2023 Important Dates

Open	Call for papers
9 Jan 2023	Submission of full papers closes
16 Jan 2023	Submission of abstracts closes
16 Jan 2023	Submission to the International Cartographic Exhibition opens
1 Feb 2023	Conference registration opens
12 Feb 2023	ICA Scholarship application closes
28 Feb 2023	Notification of acceptance for full papers and abstracts
8 May 2023	Submission of revised papers and abstracts
15 May 2023	Early Bird registration closes
15 May 2023	Registration deadline for presenters of abstracts, papers and posters
15 May 2023	Submission to the International Cartographic Exhibition closes

International Cartographic Conference
icc2023.org

ICC 2023 Conference Program

Date	Morning	Afternoon	Evening
Saturday 12 August	Workshops	Workshops Orienteering Event	—
Sunday 13 August	ICA General Assembly (Day 1)	ICA General Assembly (Day 1)	Opening Ceremony Keynote (1)
Monday 14 August	Keynote (2) Technical Sessions Poster Session Exhibition	Technical Sessions Poster Session Exhibition	Reception Cocktails
Tuesday 15 August	Keynote (3) Technical Sessions Poster Session Exhibition	Technical Sessions Poster Session Exhibition	—
Wednesday 16 August	Keynote (4) Technical Sessions Poster Session Exhibition	Technical Sessions Poster Session Exhibition	—
Thursday 17 August	Keynote (5) Technical Sessions Poster Session Exhibition	Technical Sessions Poster Session Exhibition	Conference Dinner
Friday 18 August	Technical Sessions Poster Session Exhibition ICA General Assembly (Day 2)	Closing Ceremony	—

The main entrance to the Cape Town International Conference Centre | Photography Dewet (CC-BY-SA-2.5)



ica news children's map awards 2023

The Barbara Petchenik Competition is a biennial map drawing competition for children. It was created by the International Cartographic Association in 1993 as a memorial for Barbara Petchenik, a past Vice president of the ICA and cartographer who had a lifelong interest in maps for children. The aims of the competition are to promote children's creative representation of the world, to enhance their cartographic awareness and to make them more conscious of their environment.

The competition is organized in all participating ICA member countries in two stages, national and international. In a national round the national winners are selected. They are then exhibited during the International Cartographic Conference, where the international winners are announced. The awards, preferably at least one for each continent and only one award by country, are given with special consideration to the age of the child producing the drawing. The awarded drawings can be submitted to international organizations (UNICEF or other) for consideration as greeting cards or other publication.

The Association together with the ICA Commission on Cartography and Children invites member countries and affiliated members to participate in the 2023 edition of the competition. You are encouraged to organize the national round of the competition and then select a maximum of six maps to represent your country in the international contest. The entries should be collected in four age groups: under 6 years, 6–8 years, 9–12 years and 13–15 years. The submission deadline is 1 May 2023. The theme of the 2023 competition is ***A map of my future world***.

The maps will be displayed at the Barbara Petchenik International Children's Map Exhibition during the 31st International Cartographic Conference to be held in Cape Town, South Africa, between 13–18 August 2023. An International Jury will select the international winners in each age group. In addition, a Public Award will be given based on the votes of visitors to the exhibition. The ICA Commission on Art and Cartography will present a Creativity Award.

It is very important to note that from 2019 all national coordinators can also participate in the voting process by e-mail, which is organized by the International Jury before each International Cartographic Conference. For this reason, please send the details of national coordinators to José Jesús Reyes Nuñez (jesusreyes@caesar.elte.hu), Vice Chair of the ICA Commission on Cartography and Children.

For detailed information regarding competition rules and other documents, please visit icaci.org/petchenik/ and lazarus.elte.hu/ccc/ccc.htm, as well as in the Commission's Facebook profile on www.facebook.com/icaccc. We are looking forward to hearing from you.

José Jesús Reyes Nuñez | Vice Chair | ICA Commission on Cartography and Children | Hungary ■

icc 2025 vancouver 🍁 canada



During its meeting in Cape Town, South Africa, in August 2022, the ICA Executive Committee (EC) considered bids for organising the Interna-

tional Cartographic Conference in 2025. In accordance with Article 14 of the ICA Statutes and By-laws (icaci.org/ica-statutes/), the Executive Committee selected Vancouver,

British Columbia, Canada to host the 32nd International Cartographic Conference between 28 July and 1 August 2025. The EC is very much looking forward to meeting again in Canada and welcoming the entire cartographic community to what promises to be a great conference. For updates visit icaci.org/icc2025/.

Thomas Schulz | Secretary General and Treasurer | ICA ■

Aerial view of the Vancouver Convention Centre, the venue of the ICC 2025, with six-acre living roof featuring more than 400,000 indigenous plants and grasses | Photography LMN Architects (lmnarchitects.com)



ica news 25 years ago...

The piece below reports on history in the making, the preliminary meetings of one of the most successful Commissions of the International Cartographic Association. Indeed, the 11th General Assembly of the ICA ratified the formation of the ICA Commission on Mountain Cartography for the 1999–2003 term. The three names mentioned below formed the core of this group who, with time, attracted membership from all corners of the world. Now in its sixth term, the Commission lead by Dušan Petrovič (Slovenia) is as strong as ever with the 12th Mountain Cartography Workshop planned for April 2023 in yet another exciting mountain setting – Snow Mountain Ranch in Colorado, USA.

Igor Drecki | Editor ICA News | ICA ■

ICA News, No 28, Spring 1997

Call for participation in the “Working group for high mountain cartography”

Started by the German Society of Cartography in 1996, the executive committee of the German Society of Cartography (DGfK) decided to establish a special “working group for high mountain cartography”. Its aim is to stimulate the exchange of information and the collaboration of researchers in this domain. It is intended to invite specialists from different countries. At the moment, members from Germany, Austria and Switzerland are participating. At medium term (1999) it is intended to apply for accreditation as working group or commission of ICA. [...]

Interested researchers and professionals who are willing to participate in this working group are requested to contact one of the members listed below¹. Communication via Internet is preferred (if no access: By Fax).

The next meeting of the “Working group on high mountain cartography” will take place on May 6, 1997, 14:00, during the annual meeting of the German Cartographic Society (“Deutscher Kartographentag”) in Coburg/Germany. All interested researchers and professionals are cordially invited. Information will also be given on June 26, 1997, 11:00, during session 18B “mapping of mountainous areas” at the 18th ICA International Cartographic Conference in Stockholm. [...]

Lorenz Hurni, February 1997

¹ Prof Dr Lorenz Hurni, Switzerland (Chair); Prof Dr Manfred Buchroithner, Germany; and Dr Karel Kriz, Austria.

jess hepburn



My favourite element of cartography is the ability to display information in a way people can understand, opening their minds to new possibilities and opportunities.

At school I loved geography. Whilst working in a summer job at a historical property, a very kind stranger suggested that if I like maps and geography I should study Geographical Information Science BSc at Newcastle University – I have this kind-hearted stranger to thank for where I am today!

Following my undergraduate degree, I completed a PhD under Dr David Fairbairn. I used eye tracking to assess how individuals use maps and legends for decision-making in engineering scenarios. It was exciting to learn new methods of usability testing and put them into practice. Although time-consuming to evaluate, eye-tracking data enables such detailed insight into the users' interactions. I am glad that I learnt this new skill during my PhD. This furthered my interest in map use and cartography. I think it is so important to display information with the end user in mind – teams can make incredibly smart and complex models, but if they can't communicate their results to the users who need them, then is the effort wasted and the impact lessened?

Currently, I work as a Research Associate for the School of Health and Wellbeing at the University of Glasgow. Here I quantify types of place based on changes in the built environment, which can subsequently be linked to longitudinal health studies in the future.

I like to make maps and present my analysis whenever possible – when the #30daymapchallenge was released I jumped at the opportunity. I enjoy how this challenge has encouraged me to make new maps, using techniques and data which I am unfamiliar with. Cartography and maps are a big part of my life and I never want to change that. I am excited to see where my career in cartography, visualisation and geospatial data science takes me as the possibilities are endless!

Jess Hepburn | University of Glasgow | United Kingdom | jessica.hepburn@glasgow.ac.uk ■

How wet is it really in Great Britain? The annual count of 10 mm rainfall days (days where there is greater than or equal to 10 mm rainfall) averaged from 1991 to 2020. Data from Met Office UK via Esri LivingAtlas. Part of the 2022 #30DayMapChallenge: Day 7 Raster | Map by Jess Hepburn ▶

ica news reserve your copies!

icaci.org/ica-news/

After a hiatus of seven years, *ICA News* (ISSN: 2308-1015 / Online ISSN: 2308-1023) is being printed again. This important official newsletter of the International Cartographic Association (ICA) is again available in printed form for ICA members. Each member, both national and affiliate, is entitled to receive three printed copies of every issue. If you are interested in subscribing to this service and receiving your copies, please contact Igor Drecki, Editor ICA News (jdre002@aucklanduni.ac.nz) directly, providing a name of the recipient and a postal address. Please note, this service is offered by subscription only and covers all issues from newsletter No 77, December 2021. Additional copies of the newsletter can be requested at a cost.

All members are also entitled to a one-time offer of requesting printed copies of *ICA News* past issues, from No 68, June 2017 to No 76, June 2021. Please contact Igor no later than 1 August 2023, if you would like to take advantage of this offer.

Thomas Schulz and Igor Drecki | Secretary General and Treasurer / Editor ICA News | ICA ■

INTERNATIONAL CARTOGRAPHIC ASSOCIATION / CARTOGRAFIQUE INTERNATIONALE

ica news
nouvelles de l'aci

no 77 / dec 2021

president's corner

Dear Colleagues
During recent months, we have experienced variable shifts in the way that the pandemic has affected our lives. It feels like a roller-coaster of impacts, leaving us with hopes of ending us with new turns, starting us with regressive disc of the unknown, and throwing us side-by-side in waiting for the risk to be done. The 30th International Cartographic Conference (ICC) in Florence, Italy was the ICA's opportunity to put a stake in the ground to move forward beyond the many restrictions of the pandemic and to enjoy ways to safely convene among friends and colleagues. The ICA and organizers of the ICC 2021 stood as leaders of the world in advancing cartography and GIScience at a time when maps, mapping, and geospatial information have shown their value and critical relevance to leaders, decision-makers, health-care providers and the general public.

During the opening ceremony at the ICC 2021, the President of the International Science Council, Peter Gluckman, spoke about the need for actionable science for which cartographers and geospatial information scientists are so well positioned. With so many resolvable problems to the health of the planet we occupy, having each of us ask ourselves a simple question: "what have I achieved today that makes a difference?" is a simple but enormously important question that advances our work, even in minuscule ways. It is about connecting the dots.

ica awards 2021

The International Cartographic Association (ICA) has instituted a number of awards for outstanding contributions to the ICA and to cartography worldwide. At the 30th International Cartographic Conference (ICC) in Florence, Italy, the following awards were presented:

- The Carl Himmerich Gold Medal to Prof. Ulrich Freitag (Germany) and Prof. Alan W. MacEachern (USA)
- The ICA Honorary Fellowship to Prof. Georg Gartner (Austria), Prof. Ljupko Todorov (Greece) and Prof. Vladimir S. Titov (Russia)
- Citation for Outstanding Services to ICA to Magdalene Azzalí (Italy), Alberto Pansardi (Italy), Mariela Schenetti (Austria) and Paola Zamporini (Italy)

The Carl Himmerich Gold Medal was awarded during the ICC's Opening Ceremony on Tuesday, 14 December 2021, while the ICA Honorary Fellowship and Diploma for Outstanding Services to ICA were presented at the conference's Closing Ceremony on Saturday, 18 December 2021.

Citation for Professor Ulrich Freitag
Ulrich Freitag, born in 1933, is a retired engineering cartographer and an insightful cartographic theorist. He has supported countless cartographers and advised cartography-related institutions as lecture, supervisor, mentor, advisor and collaborator. Most recently, he took part in an interview about the development of world cartography with a young masters student born in the 1990s.

Freitag concentrated his studies in geography at the Humboldt University in Berlin in 1950s. He then became research assistant of geography at Technische Universität Dresden. He received his doctorate in 1960s for a thesis on traffic maps at the Geographical Institute of the Justus-Liebig University in Gießen. He became Full Professor at the Department of Geography, Free University Berlin in 1970s, where he served until his retirement in 1998.

In his original work *Die Zeitbilder und Zeichen der Kartographie* (1972), Freitag analyzed the progress of cartography through its history and addressed the nature of cartography as a communication science, but equivalent to language and text. Its another original work *Die Entdeckung der*

in this issue

president's corner :: 01
ica awards 2021 :: 01
from the editor :: 02
ica news
25 years ago :: 03
ica executive committee :: 04
ica news contributions :: 04
eurocarto 2022 :: 05
profiles
manuel schmidt :: 06
icc 2023 :: 07
reports
ica connections :: 07
ica working groups :: 13
cartographic meetings and events :: 14
icc 2021 :: 17
autocarto 2022 :: 26
calendar :: 26
ica affiliate members :: 27
children's map gallery :: 28

First page of *ICA News*, No 77, December 2021, containing extensive reports from the ICC 2021 in Florence, Italy.

wettest wetter wet



dry drier driest

Art and Cartography

artcarto.wordpress.com/

Special Issue

The ICA Commission on Art and Cartography sent out a call for submissions to our upcoming special issue of the *International Journal of Cartography* to be published in the Spring of 2024. We have accepted nearly two dozen abstracts for both full papers and invited essays, and look forward to developing the special issue along with an accompanying multimedia website that will allow us to showcase the wide range of media practices employed by artist-cartographers.

Workshop in Minneapolis, MN, USA

On Saturday, 22 October 2022, our Commission represented by Sharon Hayashi, Nick Lally, and Taien Ng-Chan, presented a ‘walkshop’ at the 42nd annual meeting of the North American Cartographic Information Society (NACIS). Titled *Mississippi Water-Map: An Acoustic Meander in Minneapolis*, the collaborative site-specific walking and listening workshop explored local knowledge on the riverfront terrain of downtown Minneapolis through experimental sound and sensory cartographic methodologies. Participants used their smartphones and earbuds to listen to the land and water as well as voices of communities, showing how intermedial mapping practices can foreground reclamations of space, narrative and memory.

Taien Ng-Chan | Chair | ICA Commission on Art and Cartography | Canada

Education and Training

education.icaci.org/

Special Issue

The ICA Commission on Education and Training organized a special issue with the *Journal of Geodesy and Geoinformation Science*, on *Cartography and Geospatial Information Education: Theories and Practices*.

As a core activity in cartography and GIS, quality education ensures the continuous rise of the power of map and geospatial data awareness, accompanied by the vigorous location-based industry, big geospatial data analysis and GeoAI. Fast forwarding technologies and diversifying geospatial data sources pose challenges to educators in higher education institutions concerning training contents, not to mention those brought in by the COVID-19 pandemic. At the same time, the new generations, growing with ubiquitous location-based technologies, do not gain better professional knowledge about maps than

previous generations, who were using analogue maps. Having said that, we have more opportunities and resources to build better education in cartography and GIS, better courses and curricula design in the education system and the society. This encourages us to reflect and explore best practices, with the help of effective and low-cost tools and resources for online teaching and learning. Data sharing and online educational resources provide the right environment for education, government and private sectors to work together and ensure the future education of cartography and GIS is more sustainable and resilient.

Accepted papers in this special issue cover topics from theoretical framework in cartographic education, new thoughts in geoinformatics to novel practices of teaching GIS. Papers in this special issue can be found at the publisher’s website: jggs.chinasmp.com/EN/volumn/volumn_19.shtml.

Tao Wang | Chair | ICA Commission on Education and Training | China

Geospatial Analysis and Modeling

gam.icaci.org/

Commission Activities

Between 13-14 December 2021, prior to the International Cartographic Conference in Florence, Italy, the ICA Commission on Geospatial Analysis and Modeling organized a pre-conference international symposium on *Geospatial approaches to combatting COVID-19*. It was a hybrid event co-organized with the ICA Commission on Location Based Services consisting of 7 sessions featuring 35 presentations. A post-event publication is a guest edited special issue of the *Environment and Planning B* journal.

Our Commission helped to organize AutoCarto 2022, the ICA Regional Cartographic

Conference in Redlands, CA, USA, 1-4 November 2022. The hybrid conference was themed *Ethics in Mapping: Integrity, Inclusion, and Empathy*. Dr Angela Yao, Commission Chair, served as a Scientific Program Co-chair at the conference. Commission members Dr Bin Jiang, Dr Xintao Liu and Dr Jean-Claude Thill co-organized the pre-conference workshop *Living Structure as a Scientific Foundation of Maps and Mapping*. Dr Lei Zou organized a special session on student success during the conference. The 4-day event was a great success with thought-provoking keynote sessions, high-quality research presentations in technical sessions, interesting pre-conference workshops, great conversations, and of course, delicious food! Special thanks go to conference co-chair Aileen Buckley, the organizing committee, and the program committee members. All of their great efforts made the event possible.

A post-event journal publication will appear as a special issue of the *Cartography and Geographic Information Science* journal, guest-edited by Eric Delmelle, Angela Yao, Gaurav Sinha and Marguerite Madden.

Xiaobai Angela Yao | Chair | ICA Commission on Geospatial Analysis and Modeling | USA

Location Based Services

lbs.icaci.org/

LBS 2022 Conference

During 12-14 September 2022, the 17th International Conference on Location Based Services (LBS 2022) has been successfully held at TU Munich, Germany. The conference was organized by the ICA Commission on Location Based Services, and hosted by Prof Liqiu Meng and Prof Jukka Krisp and their teams at TU Munich and University Augsburg. The conference featured two keynote presentations

> 08





Participants of the LBS 2022 Conference held at TU Munich, Germany in September 2022 | Image courtesy of LBS 2022

by Georg Gartner from TU Wien and Harvey Miller from Ohio State University. The 3-day programme included 39 oral presentations in 8 single-stream sessions. These oral presentations provided a general picture of recent research activities in LBS domain. Such activities emerged in the last few years, especially concerning issues of outdoor/indoor positioning, smart environment, spatial modelling, personalization, context-awareness, cartographic communication, novel user interfaces, social media, big data analysis, usability, ethics, and privacy. All accepted papers in the 'full papers' and 'work in progress' categories (double-blind peer-review) are published online at conferences.lfk.lrg.tum.de/lbs2022/proceedings.html.

The next LBS conference will be held in Ghent, Belgium, 20-22 November 2023, and hosted by Prof Haosheng Huang and Prof Nico Van de Weghe (Ghent University). We look forward to meeting you there. For more details about LBS conferences, please visit lbsconference.org.

Special Issue

A special issue on *Urban Analytical Approaches to Combatting COVID-19 of the Environment and Planning B: Urban Analytics and City Science* journal is in preparation. It is a result of a joint activity with the ICA Commission on Geospatial Analysis and Modeling. The special issue contains invited submissions from the pre-conference international symposium on *Geospatial Approaches to Combating COVID-19* (gam.icaci.org/symposium2021/) held prior to the ICC 2021 in Florence, as well as other relevant papers. All the submissions have been peer-reviewed. Currently we are making final acceptance decisions of the selected revisions. We expect to publish the special issue in 2023.

Haosheng Huang | Chair | ICA Commission on Location Based Services | Belgium / China ■

Maps and the Internet

internet.icaci.org/

Commission Activities



This year's meeting of the ICA Commission on Maps and the Internet took place during the 8th International Conference on Cartography and GIS in Nessebar, Bulgaria, in June 2022. Otakar Čerba, the Chair of the Commission, gave a brief presentation on the activities of the Commission over the past year and presented opportunities for engaging in the work of the Commission in the coming months. This was followed by a webinar featuring František Zdražil from the international association Plan4all presenting Hub4Everybody – an open-source web-based system for processing, visualisation and sharing spatial data and maps.

The meeting was attended by about 30 participants interested in maps and the Internet, including a Norwegian representative connected online. The event would not have been possible without the support of Stefan Bonchev, Vice Chair of the Conference Scientific Committee; Prof Temenoujka Bandrova, ICA Vice President and Executive Committee liaison for our Commission; and Karel Jedlička, Vice Chair of Plan4all.

In 2023, the Commission plans to run a workshop and a business meeting during the 31st International Cartographic Conference in Cape Town, South Africa. If you are interested in our Commission activities, please visit our website at internet.icaci.org. You can also find there links to other communication channels (Facebook, LinkedIn, Twitter, Discord, blog and a newsletter).

Otakar Čerba | Chair | ICA Commission on Maps and the Internet | Czech Republic ■

Marine Cartography

marine.icaci.org/

Commission Activities

The ICA Commission on Marine Cartography continues to prioritise expanding ICA nautical cartographers representation on the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (the Board). Membership was expanded to provide for four ICA representatives. The ICA has canvassed widely for nominations, including among the member states of the International Hydrographic Organization. It has been a time-consuming task but one that is starting to bring forward some nominations with two proposed appointments on foot.

Vice Chair Lysandros Tsoulos represented ICA at the IHO Board's workshop in Singapore from 7-11 November 2022 where the following items of interest to nautical cartography were addressed:

- Review of Actions from IBSC-45
- Findings on the on-site review visit to University Technology Malaysia for their S-8 Category B programme *Marine Geospatial and Cartography Programme (UTM CARTO I)* offered in collaboration with the National Hydrographic Center
- Review of the re-submissions of six educational and training programmes pending recognition
- Revision of IBSC standards and associated documents (guidelines, frequently asked questions, etc.)
- IBSC members' succession plan
- Discussion on the progress of the IHO E-learning Center project (IBSC representatives participate in the project team)
- Schedule of next year's on-site review visits

The next annual meeting of the IHO Board will be held in Tokyo, Japan, during May 2023.

Ron Furness and **Lysandros Tsoulos** | Chair / Vice Chair | ICA Commission on Marine Cartography | Australia / Greece ■

Mountain Cartography

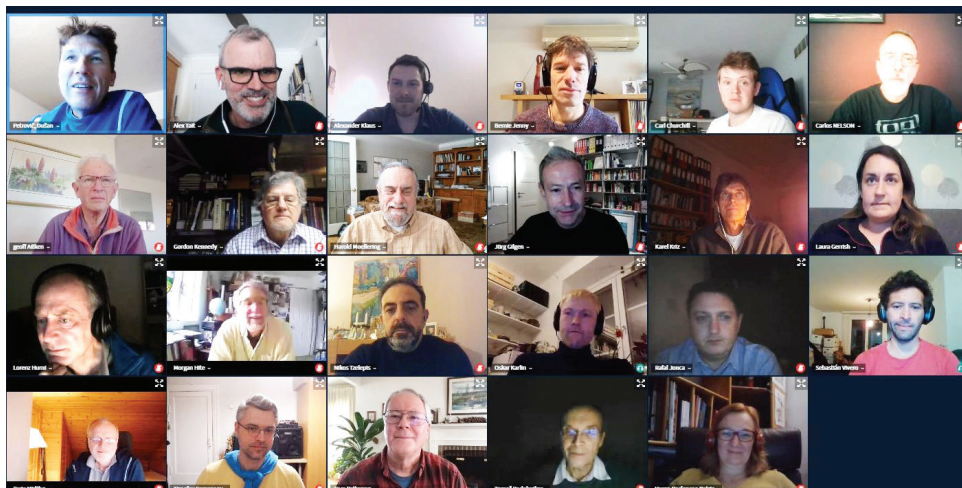
www.mountaincartography.org/

Virtual Meeting

Since the continuing pandemic did not allow us to hold an in-person workshop in 2022 (and to keep ICA mountain cartographers engaged as a cohesive group), we decided to run another, second virtual meeting of the ICA Commission on Mountain Cartography members. The meeting was held on 12 March 2022. Based on experiences from the virtual meeting in 2020 we carefully selected a meeting time so that no one would have to participate in the middle of the night. Initially planned as a business meeting in order to inform commission members about recent ICA developments, we expanded the meeting to include a mini virtual workshop to partially make up for the cancelled in-person workshop in the year. There were 28 participants from 15 countries and four continents.

The meeting started with introductions by the Commission Chair Dušan Petrovič, and the ICA Executive Committee liaison Terje Midtbø. Topics included reporting on Commission's activities at the 30th International Cartographic Conference in Florence in December 2021, some remarks from the ICA Executive Committee meetings, and the progress with the revised Body of Knowledge initiative. Next, Tom Patterson and Alex Tait presented planned activities and deadlines for the 12th Mountain Cartography Workshop in Colorado in the spring of 2023.

Highlights of the meeting were seven short presentations by commission members focusing on interesting projects that they have worked on since we last met. Morgan Hite explained usage of different sky models for relief hillshading. Jürg Gilgen compared the rock drawings on Swiss topographic maps to cartooning. Alexander Klaus presented newest high mountain cartography maps from Bildkartographie. Rafał Jońca discussed his latest terrain depiction techniques and also previewed 3D mountain animations. Alex Tait took us again to Himalayas, explaining his role and the results of a National Geographic Mapping Everest project and showed visualizations from very high-resolution data of the Khumbu Glacier and Everest Basecamp. From the highest peaks, Tom Patterson moved us to the ocean depths, explaining the creation of the Blue Earth, a worldwide bathymetry dataset. Finally, Bernhard Jenny discussed aerial



Participants of the ICA Commission on Mountain Cartography 2nd virtual meeting held in March 2022 | Image courtesy of Dušan Petrovič

perspective effect on shaded relief. The results of his method reveal a striking resemblance to manually produced Swiss shaded relief.

All presentations triggered interesting debate and gave us ideas for further work and research. After two hours our virtual gathering concluded with lots of positive comments from all participants.

During our final discussion, there was a general agreement to keep holding virtual meetings, even after in-person workshops are up and running again. We would hold the virtual meetings in the odd years between in-person workshops. Doing this will help strengthen the community and allow those unable to travel to participate.

Commission Workshop

The ICA Commission on Mountain Cartography is pleased to announce that our biennial workshop, previously postponed due to the pandemic, will be held at Snow Mountain Ranch, Colorado, United States, between 11-15 April 2023. The venue is nestled in a high valley (2,700 m, 8,860 ft) between Rocky Mountain National Park and Winter Park Ski Area.

The goal is to bring together cartographers, geographers, and other mountain cartography enthusiasts in a relaxed and beautiful setting to share new developments in cartography, design, and spatial analysis related to mountain environments.

Typically, about 50 people from multiple nations attend. Although the call for participation is over, we invite you to contact us about participating should a cancellation occur. For more information and to reach us, please visit www.shadedrelief.com/workshop/.

Dušan Petrovič and **Tom Patterson** | Chair / Vice Chair | ICA Commission on Mountain Cartography | Slovenia / United States of America ■

User Experience

use.icaci.org/

Commission Workshop

The ICA Commission on User Experience and the DGfK's Research Commission organized a workshop titled *Next Generation Cartographers: A cartographic colloquium* as part of the EuroCarto 2022 program in Vienna, Austria, between 19-21 September 2022. The purpose of the workshop was to provide a safe space for young scholars and designers to share their work, exchange knowledge, and discuss common goals and concerns in identifying ways the International Cartographic Conferences can support the next international generation of cartographers.

Twenty-eight early-career cartographers attended the roughly 2.5 hour event on Tuesday, 20 September. To open the workshop, eight young researchers presented their studies and research problems they face. Presentations were followed by discussion among all participants. In the second part of the workshop, we discussed three big questions facing the next generation of cartographers:

- What are the biggest academic challenges you are facing right now?
- What are the biggest professional challenges you are facing right now?
- What kind of opportunities can be provided to you by ICA commissions?

The workshop was supported by the ICA Commission on User Experience and organized by Edyta Paulina Bogucka (TU Munich), Florian Ledermann (TU Vienna), Sebastian Meier (Potsdam University), Robert Roth (University of Wisconsin-Madison), and Katarzyna Słomska-Przech (Polish Academy of Sciences). For more details, including program and abstracts of eight presentations, please visit the *Next Generation Cartographers: A*

> 10

cartographic colloquium website visualisierung.dgfk.net/en/events/eurocarto2022/.

Workshop organizers are currently compiling key insights and major recommendations from the workshop for presentation at the 31st International Cartographic Conference in Cape Town, South Africa, in August 2023. We hope that as a community we will be able to introduce similar type of meetings at ICA conferences to facilitate networking among young cartographers from different countries and build strong base for the ICA future.

Workshop organizers would like to invite next-generation cartographers from around the world to share challenges they face and thoughts on how ICA Commissions could help them by participating in an online survey: forms.office.com/r/NELhNtjhFh.

Katarzyna Słomska-Przech, Edyta Paulina Bogucka, Florian Ledermann, Sebastian Meier and Robert Roth | Members | ICA Commission on User Experience | Poland / Germany / USA ■



Participants of the Next Generation Cartographers: A cartographic colloquium held in Vienna in conjunction with EuroCarto 2022 Conference | *Photography S Meier*

obituary

Eddy Lynn Usery

03.10.1951 – 22.03.2022



On March 22, 2022, the world lost a GIS giant and cartography compadre when Dr Lynn Usery passed from this earthly plane. Not even a week earlier, Lynn was busily planning workshops for AutoCarto 2022.

He will be sorely missed by our community, not only for his many contributions, leadership and vision, and tireless service, but also for his friendship and camaraderie.

It's a challenge to specify the impact that Lynn has had on the field of GIScience because of the breadth and depth of his involvement and contributions. He was centrally involved in many areas of the discipline, including cartography, GIS, remote sensing, and spatial analysis. His eclectic research interests included digital cartography, map projections, scale and resolution, image classification, temporal GIS, geospatial semantics and ontology, and high-performance computing for geospatial data. It would be difficult to name a subject in our field about which Lynn could not speak knowledgeably and insightfully.

Lynn was unique in that his impact came through his careers in both government and academia. Lynn started working for the U.S.

Geological Survey (USGS) in 1977. He was a cartographer and geographer for the USGS from 1978 to 1988 focusing on developing automated cartographic production systems. In 1988, he took on a geography faculty position at the University of Wisconsin (UW) at Madison. In January of 1994, he moved to Georgia to serve on the geography faculty at the University of Georgia (UGA). In May of 1999, Lynn took on a Research Geographer position with the USGS in addition to his academic job at UGA. In 2005, he returned to USGS and ultimately conceived and became Director of the Center of Excellence for Geographic Information Science (CEGIS). In this role, he directed the science program and the visions and plans for topographic mapping research. While at USGS, Lynn also taught remote sensing at the Missouri University of Science and Technology.

In all his positions, Lynn was a ground breaker. In his early days at USGS, he began the development of digital mapping systems for the automated production of printed topographic maps. At UW, he helped found a GIS program. At UGA, he helped establish certificate programs in GIScience at both the undergraduate and graduate levels. For the Cartography and Geographic Information Society (CaGIS), he chaired AutoCarto 2005 to close an eight-year gap and resurrect the symposium series. He also spearheaded the effort to bring the International Cartographic Conference back to the United States for only the second time, the first being in 1978. Lynn was involved in multiple activities of the ICA:

- 2004–2015 US National Committee to the ICA member, from 2007 Chair
- 2007–2015 ICA Commission on Map Projections Secretary, from 2011 Vice Chair
- 2011–2012 ICA Working Group on Technology Outreach Chair
- 2011 Bid for ICC 2017
- 2012–2017 ICC 2017 Conference Organizer
- 2015–2019 ICA Vice President
- 2018–2019 ICA Working Group on the Body of Knowledge for Cartography Chair
- 2019–2022 ICA Map Projections Commission Chair

That Lynn was so involved in the ICA is admirable, that he did the same with many other societies – exceptional and unparalleled. There is truly no match for him in this regard, and really not even anyone in the running. No other person has been elected Vice President of the ICA, president of CaGIS, president of the American Society for Photogrammetry and Remote Sensing (ASPRS), and president of the University Consortium for Geographic Information Science (UCGIS), as Lynn was in 2015, 2002, 2004, and 2015, respectively. Additionally, as with the ICA, in all these associations, he also served in other roles.

On a personal note, Lynn had two children, a son Kelynn, born 1986, and a daughter, Lacy, born 1988. Lynn received his BS in geography from the University of Alabama and MA and PhD degrees in geography from UGA. He died on Tuesday, 22 March 2022, after a brief illness.

Aileen Buckley | Cartography and Geographic Information Society | USA ■

Cartographic Body of Knowledge

bok.cartography.no/

Working Group Activities

As earlier reported the ICA Working Group on Cartographic Body of Knowledge has collected keywords from the ICA commissions in order to get an overview over central terms and topics within Cartography. These keywords can be studied at the Working Group webpages (bok.cartography.no). The next step is to let the commissions elaborate on the most central keywords and make those into concepts in the Cartographic Body of Knowledge (CartoBoK).

First of all, each concept in the CartoBoK needs a clear definition. The next step would see adding further elements to the concepts, such as closer explanation, examples, use, synonyms, learning outcomes, prior knowledge, external resources, etc. Connections in the knowledge graph for CartoBoK can also be indicated.

The method for acquisition of these concepts was introduced at the ICA Commissions meeting in Vienna in September 2022 (during EuroCarto 2022). All commission chairs have subsequently been invited to contribute concepts into a web-based registration system. At the moment 12 concepts are received. Since there are about 300 keywords suggested by the Commissions, there is still a great potential to expand the number of concepts!

Terje Midtbø | ICA Executive Liaison | ICA Working Group on Cartographic Body of Knowledge | Norway ■

Digital Transformation of National Mapping Agencies

nationalmapping.icaci.org/

Working Group Workshop

"Two important characteristics of maps should be noticed. A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness. If the map could be ideally correct, it would include, in a reduced scale, the map of the map; the map of the map, of the map; and so on, endlessly, a fact first noticed by Royce."

Alfred Korzybski (1933)

A map is not the territory, but it has similar structure to the territory. What is this similar structure? It is the so called living structure, which consists of numerous substructures at different hierarchical levels. All these substructures can be automatically derived by following

the head/tail breaks, a clustering method for data with a heavy-tailed distribution. Eventually any map can be seen as the head of the head; the head of the head, and of the head; and so on. It is believed that human cartographers have been subconsciously or unconsciously guided by the head/tail breaks, essentially a bottom-up process.

The AutoCarto 2022 Workshop on *Living Structure as a Scientific Foundation of Maps and Mapping* was held online on 1 November 2022 and attracted over 20 participants from all over the world. The three-hour session was divided among the three speakers: Dr Bin Jiang, Dr Xintao Liu, and Dr Jean-Claude Thill. The first two speakers concentrate respectively on theoretical and practical aspects of the living structure, while the third speaker served as the discussant.

Bin Jiang and Juha Oksanen | Chair / Vice Chair | ICA Working Group on Digital Transformation of National Mapping Agencies | Sweden / Finland ■

History of ICA

icahistory.icaci.org/

ICA Publications

The importance of ICA publications was already acknowledged in the ICA Statutes adopted by the first General Assembly of the ICA in Paris in 1961. Article 27 *Publications, Bulletin*, gives the authority of approving all publications to the Executive Committee, highlighting their central role in developing and furthering the work of the International Cartographic Association. A year later, ICA issues its first publication – the *ICA Bulletin* (see *ICA News*, No 75, December 2020 for the story of *ICA Bulletins*).

Of course, the International Yearbook of Cartography (IYC), launched in 1961 was an important development in cartographic publishing at that time, but independent from the ICA. IYC was intended to provide the cartographic profession with a forum for the interchange of ideas, experiences and innovations. Although unable to support the Yearbook financially, the young Association welcomed it as being essential to the realisation of its own aims and objectives, and supported it by contributing papers and reports, and providing the services of Eduard Imhof who acted as its Editor for the first five years.

The next ICA's own publications were produced for the 3rd International Conference on Cartography held in Amsterdam in 1967. They consisted of reports prepared by the first ICA Commissions established at the 2nd ICA General Assembly that took place in London in 1964: Commission I *Training for Cartographers*, and Commission II *Cartographical Terminology*. Both Commissions also prepared complementary reports on cartography teaching institu-

tions in the ICA member nations, and on technical terms in cartography respectively. It appears that Commission III *Automation in Cartography* has not produced their report at that time.

In 1972, ICA published the first monograph *Oceanographic Cartography* edited by Adam J Kerr and Mrs A Kordick, as well as the *Bibliography 1956-1972* edited by Emil Meynen. These publications paved the way for further titles, such as *Automation, the New Trend in Cartography* (1973); *Computer-Assisted Cartography* (1979); and *Basic Cartography for Students and Technicians*, Volume 1 (1984). Similarly, *Abstracts of Papers* from the 6th Technical Conference of the ICA in Montreal and Ottawa, 15-25 August 1972, were amongst the first in the long string of publications from the ICA conferences (until then proceedings were published in the *ICA Bulletin* (1962 Frankfurt am Main) and then in IYC (1964 London, 1967 Amsterdam, 1968 New Delhi and 1970 Stresa)).

The 5th General Assembly of the ICA held in Moscow in 1976 established a permanent ICA Publications Committee to examine proposals for publications of the Association, to make plans in terms of production, format and style, budgets and expenditures, and arrangements for distribution. Harold Fullard was appointed its first Chair, a role he held until 1984. As Ferdinand Jan Ormeling points out in his 25 *Years of International Cartographic Association 1959-1984* book, "under Fullard's guidance the foundations were laid for 26 ICA publications, [...] spread over the following subject areas: Education (3 titles), Automation (5), Oceanic Cartography (4), Production Techniques (2), Terminology (2), Cartographic Communication (2), Remote Sensing (1), Environmental Cartography (2), Urban Cartography (2), and General (3)." This translates to over three titles per year! These statistics are testimony to the remarkable publication vitality of the Association, despite largely voluntary editorial and technical assistance due to ICA's weak financial position at that time, and Fullard's vast experience in cartographic publishing.

From around 1988, many ICA Commissions started to publish their reports and proceedings from various meetings using an established template, first introduced by the ICA Commission on Education and Training, characterised by a rather plain 'blue cover' design, a practice that continued to mid 2000s.

For obvious reasons, it is impossible to present here a comprehensive record of ICA publications. It is important to note though, that apart from reports, proceedings, monographs and bibliographies, the Association also published or still publishes technical manuals, textbooks, directories, a newsletter, and more recently its own journal – the *International Journal of Cartography*.

Igor Drecki | Chair | ICA Working Group on the History of ICA | New Zealand ■

8th International Conference on Cartography and GIS

The 8th International Conference on Cartography and GIS (8ICCGIS) took place in the beautiful city of Nessebar, Bulgaria from 20 to 25 June 2022. The Conference was organized by the International Cartographic Association (ICA), the Bulgarian Cartographic Association (BCA) and the University of Architecture, Civil Engineering and Geodesy (UACEG), Sofia with the support of Bulgarian Science Fund, Military Geographic Service and Municipality of Nessebar. The 8ICCGIS was dedicated to the 80th Anniversary of the University of Architecture, Civil Engineering and Geodesy and 10th Anniversary of BCA.

ICA President Mr Tim Trainor, who was not able to attend in person due to unforeseen circumstances, sent a video greeting to all participants. ICA Vice Presidents Prof László Zentai and Prof Temenoujka Bandrova, former ICA Presidents Prof Milan Konečný (2003-2007) and Prof Georg Gartner (2011-2015), Chairs and Vice Chairs of ICA Commissions Prof José Jesús Reyes Nuñez, Dr Otakar Čerba, Dr Zdeněk Stachoň and Eng Stefan Bonchev were in attendance. The 8ICCGIS attracted 130 attendees from 20 countries and 250 authors from 35 countries.

The following leading geoinformatics and cartography companies supported the event: Esri (platinum sponsor), HERE and DataMap-Europe. *GeoConnexion*, *ISPRS International Journal for Geo-Information*, *Remote Sensing Journal* and *Coordinates* were media partners.

During the Opening Ceremony Prof Temenoujka Bandrova, President of the Bulgarian Cartographic Association, welcomed all attendees to Bulgaria and noted that scientists, geo-specialists, and researchers from 20

countries gathered in Nessebar to report, present and discuss cartography and GIS. In addition, greetings to 8ICCGIS participants were conveyed by Mr Victor Borisov, Deputy Mayor of Nessebar Municipality; Prof Slaveyko Gospodinov, Vice Rector of the University of Architecture, Civil Engineering and Geodesy; Prof Milan Konečný (Czech Republic), President of the 8ICCGIS International Organizing Committee; Dr Alessandro Annoni (Italy), President of International Society for Digital Earth; and Mr Nick Land (United Kingdom), Esri Europe.

The attendees enjoyed a performance by the Folklore Dance Group *Nezabravka* led by Andiopa Tsvetkova, choreographer Desislava Chervenкова, and singers and bagpipers from United Municipal School of Arts, Nessebar, teachers Petko Stoyanov and Neli Taneva.

Vice Chair of the ICA Commission on Cartography and Children Prof José Jesús Reyes Nuñez (Hungary) handed a diploma and a prize to Ivayla Lazarova whose drawing *My Favourite Planet* won 1st place in the under 6 age category at the Barbara Petchenik Children's World Map Competition during the 30th International Cartographic Conference in Florence, Italy.

A Seminar on *Disaster Risk Reduction Solutions and Innovations* was organized by Prof Milan Konečný, Vice Chair of the ICA Commission on Cartography on Early Warning and Crisis Management. The Department of Geography, Masaryk University in Brno, Czech Republic was a co-organizer of the Seminar. A Workshop *Spatial information for Virtual Environments* was organized by the ICA Commission on User Experience and aroused interest among many participants. A Special ISDE Session *Digital Earth for Smart Solutions* was organized and supported by the International Society for Digital Earth.

As usual, several ICA commissions held their annual meetings: Commission on Cartography

and Children, Commission on Cartography in Early Warning and Crisis Management, and Commission on Maps and the Internet. Their meetings led to development of guidelines for future work of their members.

The conference keynote speakers inspired a great interest and set a tone for the rest of the conference sessions:

- Prof Milan Konečný: *The UN Challenges for SDGs and Sendai Framework: The Role of Cartographers*
- Dr Alessandro Annoni: *Digital Earth: Yesterday, Today and Tomorrow*
- Prof Georg Gartner (Austria): *Maps+ The Evolution of LBS*
- Mr Nick Land: *Geospatial Infrastructure for an Interdependent World*

More than 70 oral presentations were given in 11 plenary sessions, a seminar session and a special ISDE session and 10 posters were presented in 4 poster sessions. The papers are published in the e-Conference Proceedings *8th Conference on Cartography and GIS* (two volumes), published by the Bulgarian Cartographic Association (ISSN: 1314-0604).

During the 8ICCGIS, the Scientific Committee Award Jury, comprising Prof Lyubka Pashova, Prof Dariusz Dukaczewski (Poland) and Prof José Jesús Reyes Nuñez, presented two awards: the Young Scientist Award to Pál Márton (Hungary) for his paper *Geodiversity Assessment of the Eastern Styrian Prealps and its Surroundings (Austria-Hungary)*, and the Ambassador of Cartography & GIS Award to Katerina Bortlova (Czech Republic) for her paper *GIS in Real Estate Investment*.

The organizers of 8th International Conference on Cartography and GIS express their gratitude to all presenters, chairs, reviewers, authors, sponsors, participants and distinguished guests!

Temenoujka Bandrova and Silvia Marinova | Bulgarian Cartographic Association | Bulgaria ■

Participants of the 8th International Conference on Cartography and GIS held in Nessebar, Bulgaria | Photograph courtesy of Silvia Marinova





Participants of the International Symposium Cartography and Geomedia held at the Adam Mickiewicz University in Poznań, Poland | Photograph courtesy of Beata Medyńska-Gulij

International Symposium Cartography and Geomedia

On the summer solstice of 20–21 June 2022, a new form of scientific exchanges on cartography came to fruition with the first international symposium *Cartography and Geomedia*, which gathered scholars and students of cartography around a table full of maps at the Adam Mickiewicz University in Poznań, Poland. Participants included invited guests from six countries, five cartography and geomatics Master's students, five first year students, representatives of the Cartographers' Research Club and seven staff of the Department of Cartography and Geomatics.

Presentations started with Thomas Schulz, ICA Secretary General and Treasurer of the ICA, who spoke on *Current and future topics for cartography according to the International Cartography Association activities*.

The cartographic meeting was attended by scholars representing a wide range of research interests, but each of them referred to the use of maps in their talk:

- Anthony Robinson, Pennsylvania State University: *Maps, Manipulation, and Machine Learning: Understanding Cartography in Social Media*
- David Forrest, University of Glasgow: *Why Mental Map of City is More Based on an Underground Map than on the Real Geography?*
- Thomas Kersten, HafenCity University Hamburg: *Old Maps and Models in a New Guise – History as an Immersive Virtual Reality Visualisation*
- Sidsel Kvarteig, Norwegian Mapping Authority, Mapping and Cadastre: *A Point of View Mapping in Alpine Landscape in Early 19th Century*

- Wolfgang Crom, State Library Berlin: *Surveying and Measuring for Thematic Maps – the Cholera Epidemic in Europe*
- Waldemar Spallek, University of Wrocław: *School Atlases as a Medium Determining Common Geographical Knowledge Since mid-19th Century*
- Alexander Kent, Canterbury Christ Church University: *The Afterlife of Maps – Aesthetic Reasons after their Initial Purposes*
- Beata Medyńska-Gulij, Łukasz Halik, Łukasz Wielebski, Paweł Cybulski, Tymoteusz Horbiński, Maciej Smaczyński, Krzysztof Zagata, Adam Mickiewicz University: *Public and Expert Effectiveness of Geomedial Forms in Carto-Projects*
- CartoGeomatic Student Research Group, Adam Mickiewicz University: *What Do You Think About Our Carto-Geomedia Ideas?*

Each talk was followed by a lively discussion, much longer than during similar lectures or conferences, and intended to break the somewhat rigid atmosphere of formal conference sessions. In addition, other activities took place around the summer solstice. One of them was the search for a fern flower after intensively studying a special map which was only valid on 21 June. The Berlin-Hamburg team found the fern flower the fastest, so they won the competition ahead of the other three international teams. In another activity, run outdoor around the University campus, each participant symbolised a gnomon with the shortest shadow of the year, on 21 June, on the local meridian marked in our geodetic and cartographic station in Collegium Geographicum.

Furthermore, the workshops on using cartographic materials to create virtual reality reconstructions proved to be very interesting for students. The additional Geomedia workshops *Virtual Reality in Historical Reconstruction*, *VR demo*, *Segeberg 1644*, *Stade 1620* was led by Thomas Kersten and Simon Deggim from HafenCity University Hamburg. Probably the best summary of the two days in Poznań

was captured by a colleague from Hamburg: “I have participated in many big conferences, but here I have met the most engaging people and had the most direct discussions.”

Beata Medyńska-Gulij and Thomas Schulz | Adam Mickiewicz University/ Swiss Federal Statistical Office | Poland / Switzerland ■

GI_Salzburg22



Between 5-7 July 2022, we welcomed 605 participants from 29 countries to the Faculty of Natural Sciences at the University of Salzburg.

GI_Salzburg sees itself as an annual meeting point for innovation, networking and continuing education from all areas of Geoinformatics. Interdisciplinary discussions, forward-looking ideas and a personal atmosphere accompany and shape the exchange of science and research, business and application.

In a total of 50 German & English language paper sessions, forums & workshops, the professional audience was able to exchange information about the latest trends in the field of Geoinformatics. In the poster session, a total of 33 posters & storymaps were presented. All participants of GI_Salzburg22 had the opportunity to vote for the best poster. The 2022 winners were:

- 1st place: C. Zorenböhmer *et al.*, *Development of an ArcGIS Pro Toolbox for integrating big EO Data Cubes into GIS Environments*
- 2nd place: A. Droin, *Using isochronous zones to describe the permeability of urban space*
- 3rd place: G. Paulus *et al.*, *Geoinformation meets Art in the Forest at the Football Stadium in Klagenfurt, Austria*

What we as organizers are particularly pleased about is that the proportion of young participants has increased significantly compared to the previous year, from 18 participants in 2021 to 97 participants in 2022. This is a very positive trend that we definitely want to continue in the coming years. The “meet & match” format, a kind of job fair where EXPO exhibitors meet young scientists, is a particularly strong draw. The Best Student Paper Award went to Sandra Roth, for her contribution *Konnektivität der Radwegenetze und Radverkehrsanteil in deutschen Mittelstädten*, which attracted a prize of €500.

The 2022 program was focused on fewer parallel tracks with sessions covering topics such as mobility, long-term ecological research (LTER), hybrid A.I., Geosimulation and recording soil sealing using remote sensing methods. GI_Salzburg22, formerly AGIT & GI_Forum, started with a keynote by Andrea Fischer from the Institute for Interdisciplinary Mountain Research of the Austrian



GI_Salzburg22: (from left) EXPO is an integral part of the event; extensive networking breaks were well received; hands-on workshops complemented paper sessions | Photographs courtesy of Julia Stepan

Academy of Sciences titled *Digital representations of climate change as a prerequisite for communication, mitigation and adaptation*. This keynote theme was taken up by many other sessions, such as the LTER Forum.

The schedule of the individual sessions offered more variety than before: classic paper sessions were combined with more open formats. The possibility of being able to design a session completely freely by, for example, submitting a proposal for running a forum, was very well received by those who organized these fora, as well as by the participants onsite. In the future, we look forward to the creativity on the part of the submitters to try out different ideas and are happy to support them as organizers.

After a successful start on Tuesday, Wednesday was dedicated to our EXPO, where participants were introduced to the latest trends and applications, while exhibitors presented their projects and products. As an innovation this year we introduced the "Industry Innovation Keynotes": Peter Remesch from SynerGIS Informationssysteme GmbH and Keith Peterson from Trimble Austria gave two well-received presentations, which were further discussed at the booths afterwards.

With a total of 27 exhibitors, this year's EXPO was somewhat smaller than we used to have in the years before COVID-19, but the feedback from these exhibitors was largely positive.

GI_Salzburg22 ended with a keynote by Wouter Dorigo, Department of Geodesy and Geoinformatics, Vienna University of Technology, at which he asked whether we really need more satellites to monitor our climate. This was followed by a lively and exciting discussion.

Overall, our decision to shorten the individual sessions to 75 minutes, as well as to extend the breaks accordingly, met with positive feedback. The close proximity of all the presentation venues enabled attendees to enjoy networking breaks together.

After the conference, the organizers sent a questionnaire to all participants about the process and organization of GI_Salzburg22. The 23 questions were answered by about 1/3 of participants. When asked how would they rate

the conference as a whole, 80% responded with "very satisfied" or "satisfied". Our new approach was well received overall – we made a conscious decision to balance technical input with informal networking opportunities. As the main reason for visiting GI_Salzburg, visitors indicated networking (79%), discussions with experts (70%) and familiarisation with the latest trends (62%). Over 90% would recommend the event to their colleagues.

Strengthened by the positive feedback we have received, we are in the middle of planning GI_Salzburg23! Much of what we have tried out this year for the first time, we will keep and expand further. Call for Papers for GI_Salzburg23 is now open! Submission deadlines are:

- Full & Short Papers by 1 February 2023
- Fora, workshops & exhibitor presentations by 26 February 2023
- Posters & storymaps by 1 May 2023

In conclusion, the GI_Salzburg has returned with a strong sign of life after its reorientation, and we are already looking forward to the GI_Salzburg 2023, 4-6 July, as a fixed date in the GI event calendar next year! For details, please visit www.gi-salzburg.org.

Julia Stepan | GI_Salzburg | University of Salzburg | Austria ■

in the central North Island, but also by offering the first ever ICA event in New Zealand – the ICA Commission on Visualisation and Virtual Environments workshop. Professor Alan MacEachren, a recent recipient of the Carl Mannerfelt Gold Medal (2021), was the conference's keynote speaker and the workshop convenor. GeoCart'2001 key sessions addressed themes that link the growth of dynamic and infrastructural datasets with modern cartographic fields such as interactive mapping and visualisation, radical cartography, virtual reality, Internet mapping and geo-computation.

Two years later we met in Wairakei again, this time in February, to discuss the rapidly expanding possibilities in accessing and shaping spatial information through the recent technological advances, particularly in the area of Internet mapping and interactive visualisations. The GeoCart'2003 sessions focused on hypermaps, virtual environments, Internet and interactive mapping, geovisualisation, 3D environments, health and population mapping and cartographic education. The last theme was further elaborated by Professor William Cartwright, former ICA President (2007-2011), in his keynote address.

In order to avoid an overlap with the ICA International Cartographic Conferences, our national meetings were moved to even years, with GeoCart'2006 being the next one, this time held in Auckland in September. We were pondering the rise of virtual globes on the web that has given globalism a new meaning and spearheaded a cartographic environment where integration and innovation can thrive to merge the local and global in exotic new ways. These themes were picked up by Georg Gartner, former ICA President (2011-2015), in his keynote presentation.

The next six GeoCart conferences were reported on in the December issues of ICA News, No 51 (GeoCart'2008), No 55 (GeoCart'2010), No 59 (GeoCart'2012), No 63 (GeoCart'2014), No 67 (GeoCart'2016) and No 71 (GeoCart'2018). Due to the global pandemic, GeoCart'2020 was eventually cancelled.

Fast forward to 2022, the conference was attended by 82 delegates coming from

GeoCart'2022 Conference

After a hiatus of two years, the 10th jubilee National Cartographic Conference GeoCart'2022 convened on Wednesday-Friday, 24-26 August 2022 at the National Library of New Zealand in Wellington. It was organised by the New Zealand Cartographic Society (NZCS), a national member of the International Cartographic Association (ICA). Being a biennial conference, it was hard to believe 21 years have already passed since the very first meeting in April-May 2001 at Wairakei Resort near Taupo. GeoCart'2001 was a hit, not only by attracting 108 participants to a remote location

Australia, Canada, United Arab Emirates, United States of America and New Zealand. Submissions were invited on any topic in cartography, map curatorship, history of cartography or exploration, geovisualisation, GIScience, or other related disciplines. The GeoCart'2022 programme included 42 paper, poster and Young Geospatial Competition (YGC) presentations, as well as a special talk celebrating ten GeoCart conferences, arranged into five plenary sessions, eight parallel paper sessions, a poster session and an YGC session. In addition, we had a traditional panel with keynote speakers and a special session on Women in Spatial, jointly organised by NZCS and Surveying and Spatial New Zealand.

The conference was opened by Jan Pierce, Kaihautū Deputy Secretary Customer Delivery, Land Information New Zealand; and Joan McCracken, Leader, Outreach Services, National Library of New Zealand. We had four inspiring keynotes that interwove librarianship, and professional and academic cartography with a touch of a personal narrative. We were invited to the world of curatorship to appreciate the role of libraries in documenting and preserving cartographic collections (Sarah Ryan, State Library Victoria, Australia). We were challenged to explore truthfulness in map-making through a lens of cartographic ethics (Kenneth Field, Esri, United States). We were encouraged to take a step above the level at which we create maps and other geovisualisation products, to identify gaps in representation that could be filled in future outputs, through a process of

'metageovisualisation' (Antoni Moore, University of Otago, New Zealand). Finally we were taken on a personal cartographic journey, from the first contact with geography (at the age of 15), hand-drawn maps and reprographics, to digital mapping, the use of mixed media, multimedia and contemporary Web mapping (William Cartwright, CIGConsulting, Australia). The special presentation *GeoCart Time Ten: Confessions of a Diehard Fan* took us back to look at the history of the meetings, the people who shaped the conference and made it what it is known for, and their tangible contributions since 2001 (Igor Drecki, National Library of New Zealand). We have learned that 603 people attended GeoCart conferences, coming from 23 countries spanning six continents, and delivering 440 paper and poster presentations, 31 keynotes and one special presentation. The most popular themes explored at the meetings were: visualisation and representation, mapping natural and human environment, historical cartography, thematic cartography, cartographic education, map design, web and interactive mapping, geospatial data, government mapping, applied cartography, experimental and critical cartography, visual and spatial analytics, and curatorship.

The contributions to GeoCart'2022 programme echoed the thematic trend of the previous meetings, with a particular emphasis on visualisation, change analysis and hazards mapping. Talks in the *Visions for Geovisualisation* session focused on the promotion of scientific thinking in cartography and the new

approaches to mapping statistical and financial data. A complementary *Geovisualisation and Design* session explored alternative ways of mapping, from wayfinding to woven maps, with a touch of pure cartographic art in the shape of a massive hand-drawn map of the natural world. The *Change in Land and Snow* session dealt with the application of automated processing land classification in analysing change, some enhanced by interactivity. The *Hazards* session looked at modern cartographic and geospatial tools to address issues of drought, fire and snow, as well as human wellbeing.

The other dominant themes covered historical cartography, human environment and government mapping. The contributions of James Cook, Hartley Ferrar and Julius von Haast to the understanding of New Zealand geography and geology were illuminated in the *Historical and Archaeological* session. The *Human* session highlighted the application of analytical tools in dealing with various challenges concerning property, transportation and health. The *Hydrological and Geological* session covered the latest developments in visualising the seafloor and multi-dimensional geological data, complemented by reports on national navigation charting. The challenges facing topographic mapping and geospatial capability building interwoven with cartographic education were the subject of the *National and Education* session.

The poster session provided a real mix of themes, from taking us on a ride by (un-

> 16

GeoCart'2022 in pictures: (top row from left) Ian Muehlenhaus; keynote speaker William Cartwright; Ellorine Carle; Sascha Nolden; keynote speaker Kenneth Field; Jessie Colbert; (middle row) one of the plenary sessions; keynote speakers Antoni Moore and Sarah Ryan with David O'Sullivan moderating a discussion; Mairéad de Róiste; Mark Rattenbury; (bottom row) Lars Brabyn; afternoon break; Sarah Ryan and Linda Beale – facilitators of the Women in Spatial session; Benjamin Jones | *Photography Shannon McColley*



manned) aerial vehicles to assess the quality of pine forests, through the investigation of strand cracks and ice-shelf flexure in Antarctica, to the determination of a historic Māori great feast location utilising spatial analysis techniques. Similarly, YGC talks juxtaposed theoretical and practical approaches to cartography and surveying. The panel discussion with keynotes, facilitated by David O'Sullivan, provided an opportunity for GeoCart'2022 attendees to interact with Sarah, Kenneth, Antoni and William in a semi-formal way. One hour passed so quickly making us all crave more!

GeoCart'2022 delivered a programme of lasting quality and uplifting spirit that made us appreciate the value of meeting together and talking cartography. The conference sessions spanned personal, professional and academic cartography, with content stretched into the corners of surveying, geospatial and GIScience topics. As is customary with GeoCart, a sampling of New Zealand and international cartography was on display at the National Cartographic Exhibition. A selection of national maps, including winning entries to the NZCS Map Awards 2022, will represent New Zealand at the International Cartographic Exhibition in Cape Town, South Africa. The Society plans to publish Conference Proceedings in 2023 as the 7th volume of the CartoPRESS Occasional Publications series (ISSN 2382-0381).

The conference Organising Committee led by Roger Smith (Conference Director) and Antoni Moore (Chair of the Programme Committee), and supported by Shannon L. McColley, Emory Beck, Melissa West and Igor Drecki, did a superb job of making GeoCart'2022 a success. We would also like to acknowledge our sponsors – Land Information New Zealand, an affiliate member of ICA; National Library of New Zealand; Geographix; and Survey and Spatial New Zealand – thank you!

GeoCart'2022 was special. And not only because it was our 10th jubilee meeting with an engaging and inspiring programme, but also because of the uplifting atmosphere. Attendees were simply happy to be at the event, to share, to exchange, to network, and to appreciate each other's company. Bring on GeoCart'2024!

Igor Drecki | New Zealand Cartographic Society | New Zealand ■

EuroCarto 2022

From 19 to 21 September 2022, the Vienna University of Technology (TU Wien) hosted the 3rd European Cartographic Conference, EuroCarto 2022. The conference was endorsed by the International Cartographic Association (ICA) and jointly organized by the Research Unit Cartography at TU Wien, the German (Dgfk), Austrian (ÖKK), Swiss (SGK) and British



Prof Georg Gartner at the EuroCarto 2022 Opening Ceremony | Photograph courtesy of EuroCarto 2022 LOC

(BCS) Cartographic Societies. Sponsors were the Environmental Systems Research Institute (Esri), the Federal Office of Metrology and Surveying (BEV) and the University of Toronto Press Journals Division (UTP). The conference provided a forum for discussion, exchange, and research collaboration for cartographers and professionals in related disciplines.

Pre-conference workshops, meetings, and a reception ceremony kicked off EuroCarto 2022 on Sunday, 18 September. The event was opened by Prof Georg Gartner, conference head organizer and ICA former President (2011-2015), who pointed out that cartography is highly relevant, contemporary and popular, as maps matter more and more in times of digitalization and data everywhere. His address was followed with presentations by:

- Prof Johannes Böhm, Head of the Department of Geodesy and Geoinformation at TU Wien
- Martin Polaschek, Federal Minister for Education, Science and Research
- Cristina Fraile, the Spanish Ambassador to Austria
- Wolfgang Kainz (ÖKK), Jochen Schiewe (Dgfk), Mark Wigley (SGK) and Alex Kent (BGS), Presidents of the their respective Cartographic Societies
- Tim Trainor, ICA President
- Ulrich Freitag, Professor Emeritus at the Institute of Geographical Science, Berlin Free University.

Thomas Schulz, Secretary-General and Treasurer of ICA, closed the Opening Ceremony by handing out 31 scholarships for early career scientists and professionals in cartography and GIScience.

During the following days, 280 participants from 38 countries attended the conference in person. EuroCarto 2022 featured 128 oral presentations organised into parallel sessions

and 35 poster presentations highlighting the current research in cartography. The conference programme explored topics such as Atlas Cartography, Cartographic Education, Perception and Cognition, Visualization and Design, and Collaborative Mapping, among others. Proceedings of the conference are published in Volume 5 of the *Abstracts of the International Cartographic Association* series (www.abstr-int-cartogr-assoc.net/5/index.html).

Besides the technical and scientific program, the conference offered social networking opportunities, including an ice-breaker reception at the opening ceremony, a conference dinner in an ancient Viennese cellar venue, and a farewell event. EuroCarto 2022 also featured side activities in cooperation with different institutions: such as the exhibition *The Longest Voyage* presented by the Spanish Embassy, a guided visit to the *Tabula Peutingeriana* at the National Library, the only preserved map of the public road system of the late Roman Empire, and the orienteering event *MapRun* close to the conference venue.

For more information and pictures from the event, please visit www.eurocarto2022.org.

Andrea Binn and Georg Gartner | EuroCarto 2022 Local Organising Committee | Austria ■

Argentinian Map Contest for Children

The Centro Argentino de Cartografía (CAC) and the Instituto Geográfico Nacional (IGN), an affiliate and a national member of the International Cartographic Association, organized the National Cartographic Contest 2022 for children. The aim of the competition was to pay



The National Cartographic Contest 2022: members of the Jury at work | Photograph courtesy of Ana María Garra

tribute to those involved in the Malvinas Islands (Falkland Islands) conflict of 1982. The title of the contest *Malvinas Islands, South Georgia Islands and South Sandwich Islands* was broad, so that in addition to the conflict, other themes concerning those territories such as topography, history, geography, ecology, population, etc., could be addressed and represented on maps in conventional and symbolic form. The students were encouraged to apply different graphic techniques.

We received 902 drawings from 53 schools and 5 individual children from the City of Buenos Aires and 13 provinces, from Salta in the north to Antarctica in the south. The drawings were classified into four categories to cover the primary and secondary school levels and the corresponding age groups:

- Category 1: 6 to 8 years old (0,6% of entries)
- Category 2: 9 to 12 years old (12,6%)
- Category 3: 13 to 15 years old (75,7%)
- Category 4: 16 to 19 years old (11,1%)

All submissions were judged applying the following four criteria: recognizable message, cartographic content, quality of execution, and creativity and originality. The Jury consisted of 5 members:

- Colonel Alfredo Augusto Stahlschmidt, Malvinas Veteran and past Director of the Military Geographic Institute (IGM)
- Major Colonel Celestino Mosteirín, Malvinas Veteran and CAC Representative
- Cristina E. Juliarena, Geography Teacher, member of the ICA Commission on Cartography and Children
- Claudia Tamayo, Management of Automation Systems and Robotics Teacher, National Director of Cartographic Production at IGN and IGN representative
- Iris Ulloa, Arts Teacher and professional specialized in Plastic Arts and Education

The Jury decided to award three prizes (1st, 2nd and 3rd place) for each of the four categories with additional eight works receiving special mentions.

The awards will be presented to the winners on 5 December 2022 during the IGN Anniversary Ceremony. All other participants (schools, teachers and students) will receive certificates of participation in the Contest from the Organising Committee.

Ana María Garra | Centro Argentino de Cartografía | Argentina

Mexican Participatory Mapping Platform

The National Institute of Statistics and Geography (INEGI), responsible for the national mapping of Mexico, developed a web-based participatory platform for capturing and updating the country's geographic and topographic features.

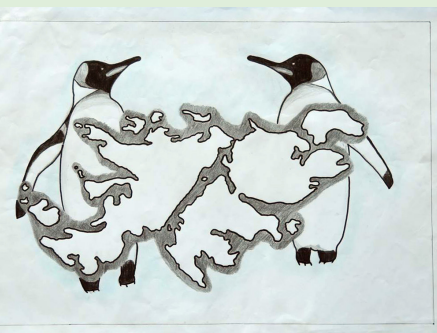
The Participatory Mapping platform provides a set of powerful tools that can be used to map a particular territory utilising local knowledge, harnessing contributions from the general public, government agencies and academic institutions. Information provided by the users makes it possible to update the INEGI cartographic databases by adding new features and recording changes, such as roads and their names; street numbers; towns and their names; median strips, development blocks; cycle paths; places of interest (monuments, airports, bus stations, churches, squares, etc.); urban features (street lights, ramps for wheelchairs, traffic lights, light poles, telephone booths, rainwater collectors, fountains or water mirrors, etc.), among others.

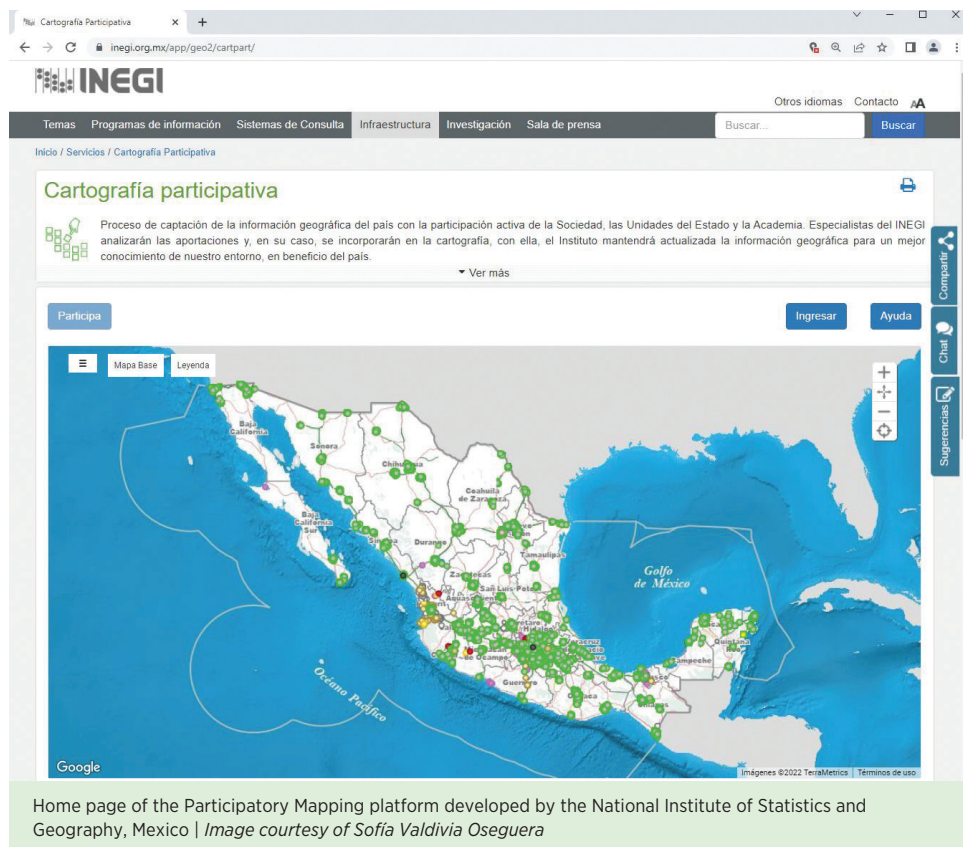
The mapping is done entirely online, providing academic institutions with access to the tools and services that are particularly beneficial to students who readily participate in mapping activities. The platform is also appreciated by the general public, as it allows accessing and updating infrastructural information concerning their neighbourhoods, such as electricity, water, telephone, cable, internet, and others. INEGI's databases are particularly useful for identifying supply companies, in case the services they provide are disconnected or a new connection is required.

To ensure quality of the data, specialized INEGI personnel review contributions provided by the users using satellite imagery and street view applications. If necessary, they undertake field check to verify input. Once the information is verified, the official data is then added, such as street names, direction of the road, suburb names, and any other details to improve information clarity.

To gain access, users must first register to the participatory platform by providing standard personal details (for academic institutions, a formal agreement is required). Once logged in, they can navigate to the location of a feature they want to add or edit, enter its position as accurately as possible, and provide its attributes or other relevant information (subject, geographic element, type of report, brief description of the situation, photographs if applicable). By pressing the 'send' button, the system acknowledges receiving a submission. Once the information is validated, an email

Maps drawn by children participating in the Argentinian map drawing contest: (from left) Benjamin Caliani (14) and Constanza Ballejos (12) | Images courtesy of Ana María Garra





is sent to the user informing that the contribution was accepted, and indicating that it will be reflected in the next data release. When it is not accepted, the user is provided with an explanation why their submission was declined.

As of October 2022, 174 people from 32 State Coordination Offices and 10 Regional Coordination Offices of INEGI were trained to operate the project at the national level. 125 universities are using the platform, 25 State Coordination Offices are mapping, 97 students are actively contributing, and 395,434 valid geographic features have been added.

For more information about the Participatory Mapping platform please visit: www.inegi.org.mx/app/geo2/cartpart/.

Luis Ignacio Cruz Flores | Instituto Nacional de Estadística y Geografía | México

Australian and New Zealand Map Society

Annual General Meeting

The Australian and New Zealand Map Society's (ANZMapS) Annual General Meeting was held online in September 2022. Nominations were received for all positions and the new committee was elected:

- President: Martin Woods, author and history consultant

- Vice President: Michael Pearson, historical archaeologist and heritage planner, involved in polar research
- Business Manager: Andrew Eliason
- Secretary: Sarah Ryan, Senior Librarian Victorian and Australian Collections, State Library of Victoria
- Editor of The Globe: Brendan Whyte, author and cartographer
- Ex-officio: Greg Lauer, Business Development Manager for East View Geospatial, and Riaz Dean, author

Mapping the Pacific Conference

Following a hiatus of two years in which ANZMapS held its conferences exclusively online, many members were able to attend the *Mapping the Pacific* conference in Sydney on 2-3 March, held co-operatively with the State Library of New South Wales, the International Map Collectors Society (IMCoS) and the Society for the History of Discoveries. The event was held in conjunction with the State Library's exhibition *Maps of the Pacific*, tracing the European mapping of the Pacific across the centuries and based primarily on the Library's historical collections. Maggie Patton and her team are to be heartily congratulated both on organising the outstanding exhibition, and convening the very enjoyable conference.

A range of great papers was presented over the two days, both in person and via video link, dealing in different ways with the context or the detail of mapping the Pacific over time.

Opening papers set the scene for the exploration and mapping of the ocean. Matthew Edney placed it in the context of the cosmological concepts and how these influenced the form of maps such as the cordiform and Mercator representations. Robert Clancy outlined the progressive cartographic representation of the search for the southern edge of the Pacific. Robert also organised the successful conference dinner at the Union Club, and an exhibition of maps, collected by himself and his wife Christine.

Day one also included papers by Richard Pegg on the influence of Marco Polo, Margaret Sankey who explored the delayed entry of the French into Pacific exploration, Dick Pflederer on the context, history and navigational challenges of Magellan's crossing of the Pacific, and Catherine Akeroyd who discussed the impacts of Magellan's exploration and influences on the representation of the Pacific in the centuries that followed.

Day two focused on the mapping of specific parts of the Pacific, or aspects of the exploitation of the ocean. In a pre-recorded presentation, due to his being in Antarctica, Stephen Martin outlined the history of mapping of whaling, and foreshadowed his current work on the roles on Australian cetologists Bill Dawbin and Graham Chittleborough. Ian Hoskins addressed the early history and mapping of Norfolk Island; and Katherine Parker discussed the role of the Straits of Magellan as gateway to the Pacific. At the south-western corner of the ocean, Maggie Patton and Dan Kahabka outlined the history and conservation of the State Library's Tasman Map, while Lynette Russell and Leonie Stevens presented a rollicking 'whodunnit' relating to the acquisition of that map by the Library. In the final papers, Erika Persak detailed the impressive Kerry Stokes collection of maps, and Isabella Alexander and Mark Leeming recounted the 'pirating' of Cook's narratives and the early cases of copyright-related litigation this triggered.

The conference concluded with map curators Igor Drecki, Sarah Ryan, Maggie Patton and Martin Woods, in conversation about issues facing map collection in the present and recent past.

Webinar program

ANZMapS hosted two webinars in 2022, in May and November. Presentations were recorded and are made available via the Society's YouTube channel, at anzmaps.org/webinars/.

The first webinar for 2022, *Pictorial Mapmakers*, took place on 19 May. The focus was pictorial maps, which gained popularity in first half of the 20th century and are undergoing a renaissance as contemporary mapmakers find creative ways to expand traditional notions of cartography. Cartographers Melinda Clarke, Adam Mattinson and Anton Thomas spoke

about and demonstrated their craft in creating and publishing contemporary pictorial maps. Melinda recounted the processes behind producing her maps of Melbourne, and the recently released map of the Bellarine Peninsula in Victoria. Adam presented his latest project to develop a Tolkien style map of the Yarra Ranges, located in Melbourne's outer north. Anton Thomas, well known for his hand drawn map of North America, backgrounded his soon to be released Wild World nature map. The webinar was convened by Sarah Ryan, Senior Librarian at the State Library of Victoria.

The second webinar, *Making sense of place through personal connection to location*, was held on 21 November, in conjunction with Amy Griffin, Senior Lecturer, Geospatial Sciences at RMIT University, Melbourne. The webinar comprised three presentations on current research being undertaken by post-graduate students. Helen Simpson used the narrative of an Australian World War II bomber pilot to explore how emotional experiences can be analysed and mapped to locations. Joanna Gardener examined individual and shared experiences that shape both place and sense of place. The neighbourhood of Fitzroy North in Melbourne was used to investigate the role of mapping through scientific cartography, design and artistic expression. Erin Koletsis surveyed the challenges experienced by map illiterate pedestrians in an unfamiliar urban environment, resulting in the development and testing of a proof-of-concept wayfinding application.

The Globe

Two issues of the Society's journal *The Globe* were published in 2022 comprising peer-reviewed articles, reports and book reviews.

Issue 91 included papers on Mercator and Marco Polo (John Hewitt), Designing a 'nocturnal' (a volvelle for finding time) for use by early wayfarers and seafarers in Southern latitudes (Greg Eccleston); a translation and analysis of the 1979 Soviet military city plan of

Vientiane, Laos (Brendan Whyte); map analysis in a work by mystery writer Dorothy L Sayers (Brendan Whyte), and the Antipodes on Waldseemüller's 1507 world map (Robert J King);

Issue 92 benefitted from the Pacific focus generated by the past two conferences, including papers on artefacts and maps in the Kerry Stokes Map Collection (Erica Persak); James Cook and (literary) pirates (Isabella Alexander and Mark Leeming), the depiction of the Pacific on the 1519 world map of Lopo Homem (Robert J King); and Magellan's European exploration of the Great Pacific Ocean (Richard Pflederer).

Martin Woods | Australian and New Zealand Map Society | *Australia* ■

Cartographic Activities at United Arab Emirates University

Between June and December 2022, the United Arab Emirates University (UAEU), an affiliate member of the International Cartographic Association, organised several meetings and training events. They were delivered or facilitated by Dr Naeema Al Hosani, Associate Professor in Cartography in the College of Humanities and Social Sciences (CHSS):

- **26-28 July:** a lecture entitled *Factors Impacting Women Leadership in Higher Educational Institutions in the UAE* at Dubai Leadership Conference, Masterminds Business School.
- **2-5 August:** training workshops for ESTEDAD Summer Program, in collaboration with the Ministry of Education.
- **28 August:** a workshop entitled *Inspiring Reality... Sustainable Future* to UAEU students on the Emirati Women's Day 2022.

- **31 August:** a workshop entitled *Ethics Training for the Geography Students' Workplace*, in collaboration with UAEU/CHSS training unit.

- **2 November:** (with UAEU students) a field trip to the Mohammed Bin Rashed Space Center in Dubai, which – amongst its services – provides high resolution satellite images. The Center is engaged in geoscience and remote sensing research using cutting-edge technology in the fields of computer vision, image processing and geographical information systems.

- **10 November:** a workshop to UAEU students entitled *Cartography and GeoAnalytics* delivered by Eng Mohammed Dogmash, in collaboration with Dubai Municipality.

In addition, on 17 November 2022, UAEU students Ms Sarah and Ms Shamma won the 2nd place in the GIS DAY competition for their project entitled *University Students' Perceptions of Food Waste in the UAE*. On the same day, Dr Naeema Al Hosani's students delivered presentations on cartography and GIS at UAEU, in collaboration with the Mohammed Bin Rashed Space Center.

Naeema Al Hosani | United Arab Emirates University | *United Arab Emirates* ■

Japanese Encyclopedia of Maps

Encyclopedia of Maps (*Chizu nō jiten* in Japanese) was published in November 2021 by Asakura-shoten, Tokyo. Professor Emeritus Takashi Morita, former ICA Vice President (1999-2003) and Chair of the ICA Commission on Ubiquitous Mapping (2003-2011) acted as Chief Editor, with the Editorial Board comprising: Masatoshi Arikawa, Kenzo Imai, Hiroshi Ota, Yohta Kumaki, Tadimitsu Saito, Atsushi

> 20

Dr Naeema Al Hosani (second from right) with her students at the Mohammed Bin Rashed Space Center in Dubai | Photograph courtesy of Naeema Al Hosani





Cover of the Encyclopedia of Maps (Chizu-no-Jiten in Japanese) published by Asakura-shoten, Tokyo, Japan

Suzuki, Junko Suzuki, Yumiko Takizawa, and Yoshiaki Wakabayashi.

The book is a comprehensive, full-colour publication of 510 pages covering the increasingly diverse concepts of maps, from primitive pictorial spatial representations to digital maps of the 21st century. 200 descriptive entries are arranged into three parts with five chapters each:

- **A – Knowing maps** (73 entries)
 1. What is a map
 2. History of maps
 3. Map and society
 4. Types of maps
 5. Challenges of mapping
- **B – Making maps** (69 entries)
 1. Principles of map making
 2. Types of map making
 3. Map drawing and design
 4. Map production and reproduction
 5. Maps of network environment
- **C – Using maps** (58 entries)
 1. Basics of map use
 2. Use of maps by purpose
 3. Acquisition of maps
 4. Collecting and utilization of maps
 5. Maps in education and research

The book format is B5 (w 182 x h 254 x d 34 mm) and the publication language is Japanese. For more information, please visit: www.asakura-co-jp.translate.google.com/detail.php?book_code=16358&_x_tr_sl=auto&_x_tr_tl=en&_x_tr_hl=ja.

Kaori Ito | National Committee for Cartography | Japan

East View Geospatial

East View Geospatial (EVG), an affiliate member of the International Cartographic Association and a leading provider of authoritative geospatial data and GIS production services and solutions, presents the Global Census Archive® (GCA), an innovative program to collect officially published materials related to censuses from around the world. This global collection contains GIS census data as well as all available primary source and official census publications associated with a given census, from the late 1800s to the current 2020 round population censuses. GCA contains billions of data points in GIS format and millions of pages of source publications as full-text searchable PDF files, including (via special cooperation between Cengage/Gale and East View) all of the content of what was previously the world's largest aggregation of census data, the International Census Publications project.

Census data matters – now more than ever – with conflicts, natural disasters, climate change, and global population growth (or contraction in some cases) driving massive human migration, infrastructure development, and public policy challenges. GCA provides a key resource for scholars and analysts to find current and historic census data to support critical research into our changing world.

GCA provides a centralized publications platform and uniform GIS format for census materials that are typically scattered across hundreds of sources and presented in a complex database structure in multiple formats and languages. For GIS data, EVG simplifies access to this complicated material. Where available, GIS census data is procured from national census authorities and then put through a rigorous 18-step data ingestion process, which includes quality control of vector and tabular data, bilingual (native/English) translation of headers, creating a census guide, and crafting a highly detailed metadata file to aid in discovery and searchability. The result is a highly usable dataset featuring a geodatabase with administrative boundary vector data, shapefiles, census guide, original census documentation, original questionnaires, and full attribute level metadata – all in a file format ready to ingest in various GIS applications.

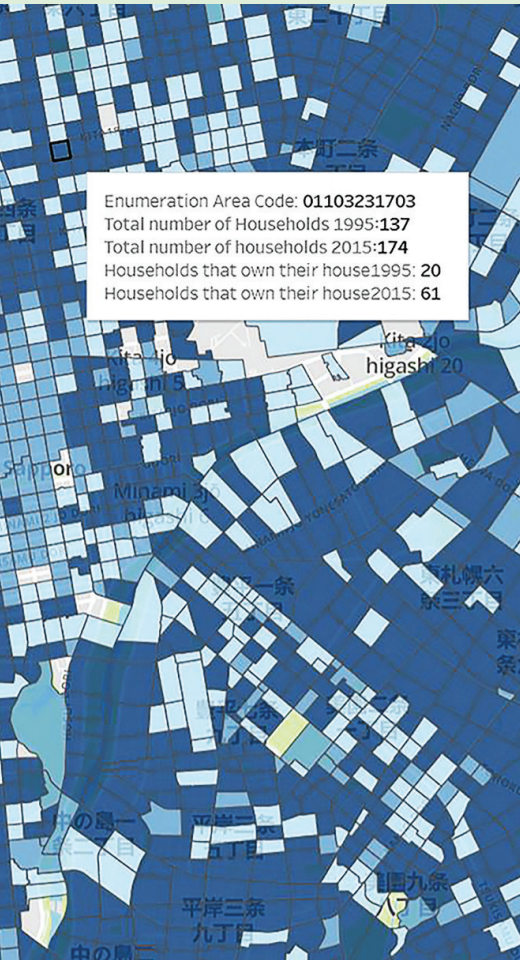
Meanwhile, published census materials present a wealth of information and provide a comprehensive picture of results, particularly in the case of older census rounds where GIS data may not be readily available. For census publications, East View collects a wide variety of published materials released by national census authorities and presents them as full-text searchable PDFs on a customized platform featuring robust browsing and

searching functionality. While the availability and type of materials will vary by country, examples of typical published materials include official results (analytical and tabular), questionnaires and survey forms, maps and atlases, methodological and preparatory works, public campaign literature, conference materials, legislative works, and more. In addition, each publications collection is accompanied by an East View-produced census catalog, which serves as a finding aid and provides historical context for the materials.

The Global Census Archive makes a wide range of census assets easily accessible for discovery and analysis. The GCA program is continually growing, with new countries and census years constantly being sourced. In addition, East View offers custom data processing for institutions that want to make their census data holdings more readily usable and discoverable. East View is also hiring statistical professionals for this long-term and wide-ranging program. Learn more at geospatial.com/gca.

Grant Bistram | East View Companies | United States of America

Data visualization of change in home ownership in Sapporo, Japan utilizing 1995 and 2015 Japan GIS census data from GCA | Image courtesy of Grant Bistram





Matvei Pilko (third from left), winner of the 2021 Barbara Petchenik Children's World Map Award, and Oren Raz, Secretary and Treasurer of the Israeli Cartographic Society (fourth from left), amongst the national winners and their teachers | Photograph courtesy of Oren Raz

Israeli Children Awarded

For the first time, Israel won 1st place in the 2021 Barbara Petchenik Children's World Map Competition held in Florence in conjunction with the International Cartographic Conference. After a long delay due to COVID-19, a ceremony for the children who won the national competition took place at the Unique Laor Cartographic Collection in the National Library in Jerusalem. Excited children, geography teachers, and representatives of the Israeli Cartographic Society and the Ministry of Education enjoyed a tour of the library and a show of rare antique maps. The highlight was a special celebration for the international winner, Matvei Pilko (10), who won the 1st place in the 9-12 age category (his map is reproduced on the back page). We hope this achievement will encourage greater participation of children in the future competitions, and assist in teaching and promoting cartography in the education system.

Oren Raz | Israeli Association for Cartography and Geographical Information Systems | *Israel* ■

Ferjan Ormeling Awarded Mercator Medal

During the summer reception of the German Cartographic Society in Berlin in June 2022, Ferjan Ormeling, former ICA Secretary General and Treasurer (1999-2007) and current Chair of the ICA Committee for the Selection of Award Recipients, was awarded the Society's highest honour – the Mercator Medal.

The Mercator Medal, like the ICA Carl Mannerfelt Gold Medal, is awarded to persons who have rendered extraordinary services to cartography through outstanding, internationally recognised scientific achievements. The Mercator Medal is so rarely awarded that Ferjan Ormeling is only its seventh recipient since the Medal's establishment in 1991. Amongst other awardees are well-known cartographers to the ICA community: Jacques Bertin, Ulrich Freitag and Ernst Spiess.

In his laudation, Jochen Schiewe, President of the German Cartographic Society, highlighted many outstanding academic and scientific achievements of Ferjan Ormeling that prompted the Society to honour him with the award. Ormeling contributed significantly to the development of research and applied cartography with more than 450 publications across the entire spectrum of cartographic domain. His

contributions to the field of toponymy have attracted worldwide attention. In this context, Ormeling also assumed various functions within the United Nations Group of Experts on Geographical Names. Another focus of his work has always been atlas cartography, which included publication of various atlases and the membership in the ICA Commission on Atlases. Apart from the famous *Bos Atlas*, the *Comprehensive Atlas of the Netherlands East Indies* (2003) and the *Comprehensive Atlas of the United East India Company* (2006) were mentioned especially. Together with Menno-Jan Kraak he authored a textbook *Cartography, Visualisation of Geospatial Data*, first published in 1990, which was later translated into English and many other languages.

Ferjan Ormeling served the International Cartographic Association for many decades. His involvement includes:

- Chair of the ICA Commission on Education and Training (1987-1999)
- ICA Secretary General and Treasurer (1999-2007)
- Chair of the ICA Publications Committee (2007-2011)
- Member of the ICA Statutes and By-laws Committee (2011-2015)
- Chair of the ICA Committee for the Selection of Award Recipients (from 2019)

Ferjan Ormeling is a long-serving member of the Commission on Atlases. For his contributions to the international discipline of cartography, he was awarded the Carl Mannerfelt Gold Medal in 2009.

Ormeling has always maintained close connections with German cartography, which is not so obvious for a Dutchman! He is a member of the German Cartographic Society since 1972 and regularly participates in various workshops and conferences. He was particularly active > 22

(from left to right) Jochen Schiewe, President of the German Cartographic Society (DGfK); Ferjan Ormeling, recipient of the Mercator Medal; and three former DGfK Presidents: Ulrich Freitag, Peter Aschenberger and Manfred Weissensee | Photograph courtesy of Thomas Schulz



in the cartographic training commission in Germany. He is also the only foreigner involved in preparations for the National Atlas of Germany. Finally, he co-organised a joint German-Dutch Cartographers' Day, which took place in Maastricht in 1999.

Thomas Schulz | Secretary General and Treasurer | ICA ■

Tim Trainor Recognised with Geospatial World Leadership Award

During the Geospatial World Forum held in Amsterdam, 10-12 May 2022, Tim Trainor, ICA President, was recognised with the Geospatial World Leadership Award in the Lifetime Achievements category for his contributions to cartography and GIScience.

Geospatial World Leadership Awards acknowledge individuals and organizations behind remarkable innovations and ideas, who are constantly experimenting and breaking barriers, who are always looking for new solutions to address critical challenges, and in the process create a huge impact on the society. While the geospatial industry undergoes a process of transformation, there are some individuals and organizations whose enthusiasm and innovative thinking in their area of expertise have brought dramatic advancements in technologies, driving our industry towards the future. Lifetime Achievement Award recognizes in particular an individual who has exhibited outstanding, innovative, and visionary leadership in geospatial technology and industry growth. For more information, please visit geospatialworldforum.org/2022/leadership-awards.html.

Thomas Schulz | Secretary General and Treasurer | ICA ■

Tim Trainor (first from left), President of the International Cartographic Association, receiving Lifetime Achievements Award at the Geospatial World Forum in Amsterdam | Photograph courtesy of Thomas Schulz



CONTRIBUTE TO THE ICA HISTORY

The ICA Working Group on the History of ICA is interested to hear from anyone who is willing to share their ICA archives and collections. We are interested in documents, records, official correspondence, publications, photographs, conference materials, promotional brochures, and any other items of relevance.

Receiving a detailed list of items in your possession would assist the Working Group in developing a good understanding of the extent

of your collection, as well as in identifying items of particular interest. In a wider context, the Working Group is working towards developing a strategy concerning discoverability and preservation of the ICA archives and collections.

If you are interested in contributing to this important work, please get in touch with Igor Drecki, Chair of the Working Group (ldre002@aucklanduni.ac.nz) or any member listed on the Working Group's website icahistory.icaci.org/contact/.

Looking forward to hearing from you!

calendar

april 2023

03-05: ICA Spring Olomouc 2023: ICA Commission on Atlases, ICA Commission on Map Design and ICA Commission on User Experience Joint Symposium | Atlases - their Design and Use | Olomouc | Czech Republic | icaspring2023.upol.cz/

11-15: 12th Mountain Cartography Workshop (organised by the ICA Commission on Mountain Cartography) | Snow Mountain Ranch, Colorado | United States of America | shadedrelief.com/workshop/

may

30-31: ICA Commission on the History of Cartography and the Belgian Royal Academy for Overseas Sciences Joint Conference | Conquering the World through Cartography. The Imperialist Turn in 19th and 20th Century Mapping | Brussels | Belgium | history.icaci.org/brussels-2023/

june

26-28: 8th International Conference on Earth Observation for Environmental Changes and the 10th International Conference on Geoinformation Technologies for Natural Disaster Management (co-organised by the ICA Commission on Sensor-driven Mapping and the Norwegian University of Science and Technology) | Trondheim | Norway

august 2023

12: ICA Commission on Location Based Services, ICA Commission on Geospatial Analysis and Modeling, and ICA Working Group on Digital Transformation of National Mapping Agencies Pre-ICC 2023 Joint Symposium | Location-based Big Data and GeoAI 2023 (LocBigDataAI 2023) | HYBRID | Cape Town | South Africa | lbs.icaci.org/locbigdata2023/

13-18: 31st International Cartographic Conference and 19th General Assembly of International Cartographic Association | Cape Town | South Africa | icc2023.org/

july 2025

28-01 august: 32nd International Cartographic Conference | Vancouver | Canada

ica affiliate members

2011 **Association of Polish Cartographers** | *Poland* | www.polishcartography.pl
Attn: Assoc Prof Joanna Bac-Bronowicz | joanna.bac-bronowicz@pwr.wroc.pl

2019 **Australian and New Zealand Map Society** | *Australia / New Zealand* | www.anzmaps.org
Attn: Dr Martin Woods | mwoods@nla.gov.au

1999 **Centro Argentino de Cartografía** | *Argentina* | www.centroargentinodecartografia.org
54 Attn: Jorge Horacio Machuca | cac@centroargentinodecartografia.org

2011 **Chinese Cartographic Association (Chinese Taipei)** | *Taiwan-China* | www.ccartoa.org.tw
Attn: Dr Ching Jen Kao | ccartoa@gmail.com

2007 **Dubai Municipality** | *United Arab Emirates* | www.dm.gov.ae
Attn: Hussein Mohammed Abdulmuttalib | huseinma@dm.gov.ae

2007 **East View Geospatial** | *United States of America* | www.geospatial.com
71 Attn: Kent Lee | geospatial@eastview.com

2005 **Eko-Graf Publishing House** | *Poland* | www.ekograf.pl
Attn: Roman Janusiewicz | ekograf@ekograf.pl

2017 **El Servicio Aerofotogrametrico del General Juan Soler Manfredini de la Fuerza Aerea de Chile (SAF)** | *Chile* | www.saf.cl
Attn: Viviana Barrientos Lardonis | viviana.barrientos@saf.cl

2003 **Esri** | *United States of America* | www.esri.com
55 Attn: Mark Cygan | mcycgan@esri.com

1995 **Geospatial Information Authority of Japan** | *Japan* | www.gsi.go.jp
72 Attn: ISCGM Secretariat | gsi-intex@ml.mlit.go.jp

2007 **German Federal Agency for Cartography and Geodesy** | *Germany* | www.bkg.bund.de
64 Attn: Dr Paul Becker | vorzimmerpraesident@bkg.bund.de

2015 **HERE Technologies** | *Germany* | www.here.com

1995 **Hexagon Geospatial** | *United States of America* | www.hexagongeospatial.com

ICON Group | *Ireland* | www.icon.ie
Attn: Emmet McHugh | contact@icon.ie

2003 **Indian National Cartographic Association (INCA)** | *India* | www.incaindia.org
62 Attn: Col Sunil S Fatehpur | secretarygeneralinca935@gmail.com

1991 **Institut Cartogràfic i Geològic de Catalunya (ICGC)** | *Spain* | www.icgc.cat
58 Attn: Jaume Massó i Cartagena | direccio.icgc@icgc.cat

1991 **Institut National de l'Information Géographique et Forestière (IGN)** | *France* | www.ign.fr
51 Attn: Dr Sébastien Mustiere | sebastien.mustiere@ign.fr

Institution of Surveyors of Kenya | *Kenya* | www.isk.or.ke
Attn: Rose Mwaura | info@isk.or.ke

2007 **Instituto Geográfico Nacional España** | *Spain* | www.ign.es
Attn: Francisco Javier González Matesanz | fjgmatesanz@fomento.es

1995 – year of ratification by the ICA General Assembly
65 – affiliate member's profile published in *ICA News* (issue number)

2011 **Land Information New Zealand** | *New Zealand* | www.linz.govt.nz
60 Attn: Melissa West | mwest@linz.govt.nz

2017 **Library and Archives Canada** | *Canada* | www.bac-lac.gc.ca
Attn: Sebastien Daneau | sebastien.daneau@canada.ca

1995 **Moscow State University of Geodesy and Cartography** | *Russia* | www.miigaik.ru
52 Attn: Prof Vasily A. Malinnikov | lgn@miigaik.ru

1991 **National Hydrographic Office** | *India* | www.hydrobharat.nic.in
Attn: Vice Admiral Vinay Badhwar, NM | ia-inho@navy.gov.in

2011 **National Land Survey of Finland** | *Finland* | www.nls.fi
67 Attn: Heli Ursin | heli.ursin@nls.fi

2007 **Ordnance Survey** | *United Kingdom* | www.ordnance-survey.co.uk
57 Attn: Paul Naylor | paul.naylor@ordnancesurvey.co.uk

2003 **Regional Centre for Mapping of Resources for Development (RCMRD)** | *Kenya* | www.rcmr.org
Attn: Dr Hussein O. Farah | rcmrdr@rcmr.org

2015 **Surveying and Spatial Sciences Institute (SSSI)** | *Australia* | www.sssi.org.au
Attn: Kerry Smyth | chair.sicc@sssi.org.au

2015 **UNIGIS International Association** | *Austria* | www.unigis.net
Attn: Prof Dr Josef Strobl | josef.strobl@sbg.ac.at

2003 **Union of Chambers of Turkish Engineers and Architects, Chamber of Surveying and Cadastre Engineers (UCTEA-CSCE)** | *Turkey* | www.hkmo.org.tr
Attn: Prof Dr Necla Uluğtekin | hkmo@hkmo.org.tr

2015 **United Arab Emirates University** | *United Arab Emirates* | www.chss.uaeu.ac.ae/en/
Attn: Dr Naeema Alhosani | naeemam@uaeu.ac.ae

2011 **United Nations Geospatial Information Section** | *United Nations* | www.un.org/depts/cartographic/english/htmain.htm
Attn: Ayako Kagawa | kagawa@un.org

1991 **United States Geological Survey** | *United States of America* | cegis.usgs.gov
65 Attn: Dr E. Lynn Usery | usery@usgs.gov

2007 **University of Architecture, Civil Engineering and Geodesy** | *Bulgaria* | www.uacg.bg
74 Attn: Assoc Prof Petar Penev | ppenev@gmail.com

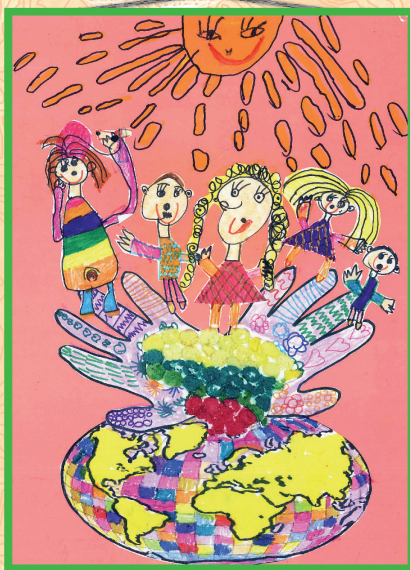
2019 **University of Belgrade, Department of Geography** | *Serbia* | www.gef.bg.ac.rs/en/
Attn: Dr Aleksandar Đorđević | adjordjevic@gef.bg.ac.rs

2017 **University of Lay Adventists of Kigali** | *Rwanda* | www.unilak.ac.rw
Attn: Dr Gabriel Habiyaemye | research@unilak.ac.rw

1995 **University of Twente, Faculty of Geo-Information Science and Earth Observation (ITC)** | *The Netherlands* | www.itc.nl
70 Attn: Prof Menno-Jan Kraak | m.j.kraak@utwente.nl

2015 **Wuda Geoinformatics** | *China* | www.geostar.com.cn
Attn: Song Aihong | songaihong@geostar.com.cn

children's map gallery 2021 winners



Elzė Marija Jakubėnaite
| 4 | *We are One Family* |
Kindergarten Dobilas: Jonava
| Lithuania

Pavol Rybár | 8 | *The Most
Important Game of Chess*
| Základná Umelecká Škola
Rajec: Rajec | Slovakia



Angela Waiman | 15 | *Holographic
Map of My Future World* | SMA
Penabur VI: West Jakarta | Indonesia

Matvei Pilko | 10 | *Stop the
Pandemic: We Love to Travel,
We Love Maps* | -:- | Israel

Ivayla Lazarova | 5 | *My Favourite
Planet* | Slaveyche Kindergarten:
Lesnovo | Bulgaria

