

29th International Cartographic Conference and 18th General Assembly of the International Cartographic Association

Tokyo, Japan, 15-20 July 2019

The organizer of the 29th International Cartographic Conference was the local organizing committee, headed by Prof. Emeritus Takashi Morita, President of the Japan Cartographers Association – JCA).

The conference was held in Tokyo in four buildings situated fairly close to each other: Tokyo International Exchange Center (Plaza Heisei), the National Museum of Emerging Science and Innovation (Miraikan), the Tokyo Metropolitan Industrial Technology Research Center and Telecom Center. The official conference language was English.

Before the official opening of the conference, several workshops were held, including one on map projections led by Miljenko Lapaine. This workshop was held on the premises of Teikoku-Shoin Co., Ltd. The company's director, Masami Komiya, addressed some words of welcome to those present. Then, the following presentations were held:

- Short Introduction of the ICA Commission on Map Projections, M. Lapaine
- Symbols in Map Projections – A Proposal for Standardization, M. Lapaine
- The Equal Earth Projection: The Five Ws About the New Projection That Went Viral Last Year, B. Šavrič
- On Semantic Representation of Map Projection Knowledge, E. Lynn Usery
- Map Projection Definition, M. Lapaine

The official conference opening was very grand. It was attended by Prince Akishino and Princess Kiko, and the prince gave a speech on the occasion. The hall where the official

opening was held could not accommodate all those interested, so the organizers arranged for a large-screen video link in a neighboring building.

Each day, there was a guest lecture (Venkatesh Raghavan, Professor of Geoinformatics, Osaka City University, Japan; Steve Coast, Vice President, TomTom; Ayako Kagawa, Geographic Information Officer, Chief Cartographic Unit, Geospatial Information Section, Office of Information and Communications Technology, United Nations and Eric Gundersen, Mapbox CEO).

The conference was extremely well organized and everything ran smoothly. There were 950 participants from 75 countries who presented 750 papers. These were published in three publications available online: Advances of the ICA, eISSN 2570-2084: Vol. 1, 2019, Proceedings of the ICA, eISSN 2570-2092: Vol. 2, 2019, and Abstracts of the ICA, eISSN 2570-2106: Vol. 1, 2019.

The papers accepted were divided into 40 groups:

- Art and Cartography
- Atlases
- Cartographic Heritage into the Digital
- Cartography and Children
- Cartography in Early Warning and Crisis Management
- Cognitive Issues in Geographic Information
- Visualization Education and Training
- Generalization and Multiple Representation
- Geospatial Analysis and Modeling
- GI for Sustainability
- History of Cartography
- Location Based Services Map Design

- Map Production and Geoinformation Management
 - Map Projections
 - Maps and Graphics for Blind and Partially Sighted People
 - Maps and the Internet
 - Mountain Cartography
 - Open Source Geospatial Technologies
 - Planetary Cartography
 - SDI and Standards
 - Sensor-driven Mapping
 - Topographic Mapping
 - Toponymy
 - Ubiquitous Mapping, Spatial DB and IoT-Based Systems
 - Use, User and Usability Issues
 - Visual Analytics
 - Marine Cartography
 - Digital Humanities and GIS
 - GIS, Remote Sensing and Cartographic Theory, Methodology and Applications
 - Visualization and Analysis of Geographical Process
 - Mapping Cities
 - Design and Visual Variables: Rethinking Jacques Bertin
 - Geo for All: Open source GIS Education
 - Crowdsourced Geospatial Information
 - Transition to Modern and Contemporary Mappings
 - Maps for SDGs
 - Mapping the Environment
 - Theoretical Cartography
 - AI, Robotics, Autonomous Cars and Mapping
 - Maps and Games
 - Big Data and Data Science
 - Others
 - Asia GIS
- The authors from Croatia presented these papers:

29. međunarodna kartografska konferencija i 18. generalna skupština Međunarodnoga kartografskog društva

Tokyo, Japan, 15–20. srpnja 2019

Organizator 29. međunarodne kartografske konferencije bilo je Lokalni organizacijski odbor na čelu s prof. emer. Takashijem Moritom, predsjednikom Japanske kartografske udruge (Japan Cartographers Association – JCA).

Konferencija je održana u Tokiju u četiri zgrade smještene relativno blizu jedna drugoj: Tokyo International Exchange Center (Plaza Heisei), National Museum of Emerging Science and Innovation (Miraikan), Tokyo Metropolitan Industrial Technology Research Center i Telecom Center. Službeni jezik konferencije bio je engleski.

Prije službenog otvaranja konferencije održano je nekoliko radionica, među kojima i radionica o kartografskim projekcijama koju je vodio M. Lapaine. Ta je radionica održana u prostorima tvrtke Teikoku-Shoin Co., Ltd. Pozdravne riječi nazočnima je uputio direktor Masami Komiya. Nakon tогa održane su ove prezentacije:

- Short introduction of the ICA Commission on Map Projections, M. Lapaine
- Symbols in Map Projections – A Proposal for Standardization, M. Lapaine
- The Equal Earth Projection: The Five Ws About the New Projection That Went Viral Last Year, B. Šavrić
- On semantic representation of Map Projections knowledge, E. Lynn Usery
- Map Projection Definition, M. Lapaine

Službeno otvaranje konferencije bilo je vrlo svečano. Sudjelovali su japanski princ Akishino i princeza Kiko, a princ je tom prigodom održao prigodan govor. Dvorana u kojoj je



održano svečano otvaranje nije mogla primiti sve zainteresirane, pa su zbog toga organizatori omogućili praćenje svečanosti na velikom ekranu u susednoj zgradici.

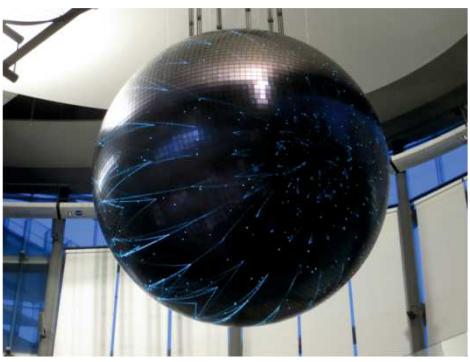
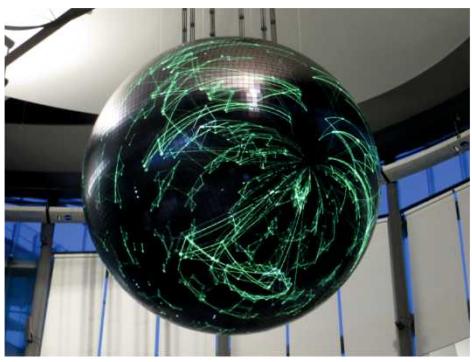
Svakog dana bilo je po jedno povzano predavanje, a predavači su bili: Venkatesh Raghavan, Professor of Geoinformatics, Osaka City University, Japan, Steve Coast, Vice president, TomTom, Ayako Kagawa, Geographic Information Officer, Chief Cartographic Unit, Geospatial Information Section, Office of Information and Communications Technology, United Nations and Eric Gundersen, Mapbox CEO.

Konferencija je bila vrlo dobro organizirana i sve se odvijalo po planu i programu. Na konferenciji je bilo 950 sudionika iz 75 zemalja koji su prezentirali 750 radova. Ti su radovi objavljeni u tri publikacije dostupne online: Advances of the ICA, eISSN 2570-2084: Vol. 1, 2019, Proceedings of the ICA, eISSN 2570-2092: Vol. 2, 2019, i Abstracts of the ICA, eISSN 2570-2106: Vol. 1, 2019.

Prihvaćeni radovi bili su podijeljeni u 40 skupina:

- Art and Cartography
- Atlases
- Cartographic Heritage into the Digital
- Cartography and Children

- Cartography in Early Warning and Crisis Management
- Cognitive Issues in Geographic Information
- Visualization Education and Training
- Generalisation and Multiple Representation
- Geospatial Analysis and Modeling
- GI for Sustainability
- History of Cartography
- Location Based Services Map Design
- Map Production and Geoinformation Management
- Map Projections
- Maps and Graphics for Blind and Partially Sighted People
- Maps and the Internet
- Mountain Cartography
- Open Source Geospatial Technologies
- Planetary Cartography
- SDI and Standards
- Sensor-driven Mapping
- Topographic Mapping
- Toponymy
- Ubiquitous Mapping, Spatial DB and IoT-Based Systems
- Use, User and Usability Issues
- Visual Analytics
- Marine Cartography
- Digital Humanities and GIS
- GIS, Remote Sensing and Cartographic Theory, Methodology and Applications
- Visualization and Analysis of Geographical Process
- Mapping Cities
- Design and visual variables: Rethinking Jacques Bertin
- Geo for All: Open source GIS education
- Crowdsourced Geospatial Information



Miraikan, 2019

- Transition to Modern and Contemporary Mappings
- Maps for SDGs
- Mapping the Environment
- Theoretical Cartography
- AI, Robotics, Autonomous Cars and Mapping
- Maps and Games
- Big Data and Data Science
- Others
- Asia GIS

Autori iz Hrvatske na konferenciji su prezentirali ove rade:

- Altić, M.: From Coast to Coast: The Mapping of the Adriatic Sea by the Joint Forces of the Austro-Hungarian and Italian Hydrographic Offices
- Bandrova, T., Lapaine, M., Marinova, S.: Certificates for High-Quality Cartographic Products
- Kušan, V., Husnjak, S., Birov, T., Žiža, I.: Historical Maps and Landscape Analysis
- Lapaine, M., Frančula, N.: Polar and Equatorial Aspects of Map Projections?
- Lapaine, M.: Map Projection Article on Wikipedia
- Lapaine, M.: Mapping in Cartography
- Rogulj, K., Racetin, I., Kilić, J., Županović, Lj.: Establishment of the Inventory of the Historic Bridges Analysing the Maps of Europe in the XIX Century, in the Area of Split-Dalmatia County, Croatia

U razdobljima između međunarodnih kartografskih konferencijskih aktivnosti ICA-e odvijaju se u sklopu većeg broja povjerenstava. Za vrijeme konferencije u Tokiju pojedina povjerenstva imala su sjednice na kojima su zainteresiranim prikazane djelatnosti u proteklom razdoblju. Sastanak Povjerenstva za kartografske projekcije kojemu je predsjedao M. Lapaine održan je prema rasporedu 19. srpnja u podne.

U spomen na svjetski poznatog kartografa Waldu Toblera koji je preminuo 2018. godine održana je posebna sjednica na kojoj su govorili Aileen Buckley, Sara Fabrikant, Timothy Trainor, Harold Moellering i Menno-Jan Kraak.

Na međunarodnoj izložbi karata postavljenoj u zgradi Telecom Centra bilo je izloženo 385 karata i kartografskih proizvoda iz 30 zemalja. Izlošci su bili podijeljeni u ove kategorije:

- Karte
- Pomorske i zrakoplovne karte
- Atlasi
- Digitalni proizvodi
- Digitalni servisi
- Kartografski obrazovni proizvodi
- Ostali kartografski proizvodi

Hrvatska je sudjelovala s ovim izlošcima:

- Basic Geological Map of the Republic of Croatia at the scale of 1:50.000 National Park Kornati, Croatian Geological Survey, V. Brčić, T. Korbar, L. Fuček, D. Palenik, N. Belić, I. Mišur, L. Wacha
- Nautical Chart Nr. 18 - Port of Rijeka, Hydrographic Institute of the Republic of Croatia, Ivana Kordić and Pejo Bročić
- Nautical Chart nr. 15 (INT 3474) - Rijeka, Hydrographic Institute of the Republic of Croatia, Ivana Kordić and Pejo Bročić

U kategoriji ostalih kartografskih proizvoda Hrvatsko kartografsko društvo izložilo je dva izdanja časopisa Kartografija i geoinformacije (2018, vol. 17, br. 29 i 2018, vol. 17, br. 30), a Državna geodetska uprava monografiju 70. godina Državne geodetske uprave.

Međunarodni žiri odabrao je najbolje kartografske proizvode u šest kategorija. Osim toga, glasovali su i posjetitelji. Pobjedničke i nagrađene karte mogu se pogledati na internetskoj adresi <https://icaci.org/recipients-of-the-ica-map-awards-2019/>.

Natječaj za najbolje djeće likovne rade i Nagradu Barbara Petchenik pokrenulo je Međunarodno kartografsko društvo 1993. godine kao uspomenu na Barbaru Petchenik, dopredsjednicu toga društva i kartografinju koja je cijeli život radila s kartama i djecom. Nagrade se dodjeljuju svake druge godine za vrijeme međunarodne kartografske konferencije s posebnom pažnjom posvećenom dobi djeteta. Ciljevi natjecanja su promoviranje dječjeg kreativnog prikazivanja svijeta u grafičkom obliku, poboljšanje

njihove kartografske percepcije i percepcije okoline.

Natjecanje u Hrvatskoj provelo je Hrvatsko kartografsko društvo. Na natječaj je stiglo 227 dječjih likovnih rada. Povjerenstvo u sastavu red. prof. art. Ines Krasić, izv. prof. art. Tomislav Buntak i doc. art. Igor Čabraja s Akademije likovnih umjetnosti Sveučilišta u Zagrebu, prof. emer. Miljenko Lapaine i doc. dr. sc. Ivka Kljajić s Geodetskog fakulteta Sveučilišta u Zagrebu izabralo je šest najboljih dječjih rada na temu "Volimo karte" (*We love maps*) koji su bili izloženi na izložbi u Tokiju, 15–20. srpnja 2019. Na toj je izložbi bilo izloženo 188 dječjih likovnih rada iz 33 zemlje. Detalji o provedenom natječaju u Hrvatskoj objavljeni su u Kartografiji i geoinformacijama, 2019, vol. 18, br. 31, 116–129.

18. generalna skupština ICA-e

Za 18. generalnu skupštinu ICA-e priređeni su nacionalni izvještaji većine zemalja članica, među kojima je i Hrvatska. Svi nacionalni izvještaji dostupni su na web-stranicama ICA-e (<https://icaci.org/national-reports/>). Na 18. generalnoj skupštini ICA-e održanoj prvog i posljednjeg dana međunarodne kartografske konferencije u Tokiju bilo je na dnevnom redu puno točaka. Među ostalim, pravo glasa oduzeto je Srbiji, Indoneziji, Madagaskaru i Mozambiku. Iz ICA-e su isključene Srbija i pridruženi članovi GeoTech Vision iz Jamaike i INCA iz Indije. Nove članice ICA-e postale su Oman i Armenija, a novi pridruženi članovi Geografski fakultet Univerziteta u Beogradu iz Srbije i Kartografsko društvo Australije i Novog Zelanda.

Za sljedeći četverogodišnji mandat izabrani su novi predsjednik ICA-e Tim Trainor iz SAD-a, glavni tajnik Thomas Schulz iz Švicarske te sedam dopredsjednika: László Zentai iz Mađarske, Temenoujka Bandrova iz Bugarske, Vít Voženílek iz Češke, Philippe De Maeyer iz Belgije, Terje Midtbø iz Norveške, Liqiu Meng iz Njemačke i Andrés Arístegui iz Španjolske.

Na svečanom zatvaranju konferencije proglašene su najbolje karte s izložbe i najbolji dječji likovni radovi.

- Altić, M.: From Coast to Coast: The Mapping of the Adriatic Sea by the Joint Forces of the Austro-Hungarian and Italian Hydrographic Offices
- Bandrova, T., Lapaine, M., Marinova, S.: Certificates for High-Quality Cartographic Products
- Kušan, V., Husnjak, S., Birov, T., Žiža, I.: Historical Maps and Landscape Analysis
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In the periods between international cartographic conferences, many ICA commissions carry out their activities. During the Tokyo conference, there were sessions when they presented their activities during the last period to all those interested. The session of the Commission of Map Projections, presided over by M. Lapaine, was held according to schedule on the afternoon of 19 July.

In memory of the world renowned cartographer Waldo Tobler, who died in 2018, a special session was held at which Aileen Buckley, Sara Fabrikant, Timothy Trainor, Harold Moellering and Menno-Jan Kraak were the speakers.

A total of 285 maps and map products from 30 countries were shown at an international exhibition in the Telecom Center building. The exhibits were divided into these categories:

- Maps
 - Atlases
 - Digital products
 - Digital services
 - Educational cartographic products
 - Other cartographic products
- Croatia's contribution to these exhibits comprised:

- Basic Geological Map of the Republic of Croatia at the scale of 1:50 000 Kornati National Park, Croatian Geological Survey, V. Brčić, T. Korbar, L. Fuček, D. Palenik, N. Belić, I. Mišur, L. Wacha
- Nautical Chart no. 18 – Port of Rijeka, Hydrographic Institute of the Republic of Croatia, Ivana Kordić and Pejo Bročić
- Nautical Chart no. 15 (INT 3474) – Rijeka, Hydrographic Institute of the Republic of Croatia, Ivana Kordić and Pejo Bročić

In the category 'Other cartographic products' the Croatian Cartographic Society exhibited two issues of *Cartography and Geoinformation* (2018, vol.17 no 29, and 2018, vol. 17 no 30) and the State Geodetic Administration exhibited a monograph on its 70th anniversary. An international jury selected the best cartographic products in six categories. Visitors were also able to vote. The winning maps can be seen at <https://icaci.org/recipients-of-the-ica-map-awards-2019/>.

The Barbara Petchenik Prize for the best children's artwork was launched by the ICA in 1993 in memory of Barbara Petchenik, its vice-president and a cartographer who spent her whole life working with maps and children. Awards are made every two years during the ICA conference and the age of the children is taken into account. The aim is to promote children's creative depictions of the world in visual form, improving their cartographic perception and perception of their environment.

The competition in Croatia was organized by the Croatian Cartographic Society. Two hundred and twenty-seven pieces of art by children were received. A commission consisting of Prof. Art Ines Krasić, Assoc. Prof. Art Tomislav Buntak and Dr. Art Igor Čabraja from the Academy of Fine Arts of the University of Zagreb, Prof. Emer. Miljenko Lapaine and Assist. Prof. Dr. Ivka Kljajić of the Faculty of Geodesy, University of Zagreb, selected the six best children's works on the topic 'We Love Maps'. These were

exhibited in Tokyo from 15–20 July 2019. Altogether, 188 children's works from 33 countries were shown. Details of the competition were published in *Cartography and Geoinformation* 2019, vol. 18 no. 31, 116–129.

18th General Assembly of the ICA

National reports from most member countries, including Croatia, were received before the 18th General Assembly of the ICA. All these national reports are available on the ICA web pages (<https://icaci.org/national-reports/>). The 18th General Assembly was held on the first and last days of the Tokyo conference and had a full agenda. Among other things, voting rights were withdrawn from Serbia, Indonesia, Madagascar and Mozambique. Serbia was excluded from the ICA along with two associate members, GeoTech Vision from Jamaica and INCA from India. Oman and Armenia became new members, while the Faculty of Geography of the University of Belgrade, Serbia, and the Cartographic Society of Australia and New Zealand became new associate members.

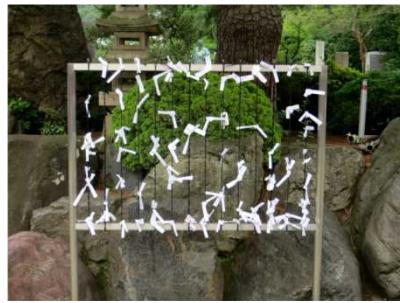
Tim Trainor (USA) was elected as the new president of the ICA for a four-year period. The new general secretary is Thomas Schulz (Switzerland) and there are seven vice-presidents: László Zentai (Hungary), Temenoujka Bandrova (Bulgaria), Vít Voženílek (Czech Republic), Philippe De Maeyer (Belgium), Terje Midtbø (Norway), Liqiu Meng (Germany) and Andrés Arístegui (Spain).

During the closing ceremony, the best maps in the exhibition and the best children's artworks were announced. Evangelos Livieratos (Greece) and Miljenko Lapaine (Croatia) were made honorary fellows, and Takashi Morita (Japan) was awarded a Diploma for Outstanding Services to the ICA.

Social program

Tokyo lies in the Tokyo Bay in the central part of the eastern coast of Honshu Island, at the mouth of the River Sumida. The main parts of Tokyo are Ginza, Shinjuku and Odaiba. It is





Meeting Emiko Tsutsumi / Susret s Emiko Tsutsumi

the capital and the largest city in Japan, as well as being an important sea port. It is one of the most densely populated cities in the world and the center of Japanese and Asian markets and industries. The conference participants were able to choose visits to one of the cartographic institutions or a sightseeing tour in and around Tokyo. One option was to visit the Tokyo City View at Roppongi Hills, which has an observatory deck on the 52nd floor of a skyscraper with a cafe, restaurant, souvenir shop, the Mori Art Museum and the Mori Arts Center

Gallery. After seeing Tokyo from a great height, we enjoyed a cruise along the River Sumida.

A formal dinner was held at Hoppo-en Restaurant, which is founded on several aspects of Japanese culture (traditional gardens, architecture, culinary techniques, art and music) essential to understanding Japanese beauty and culture. The pianist Fuka Tanaka, and the flautist Yasukazu Kano and his trio delighted the guests with their music, and the traditional dancer Kagurazaka Geisha performed a Japanese dance, *Nihon Buyo*.

Meeting Emiko Tsutsumi

Emiko Tsutsumi is a professor at Otsuma Women's University in Tokyo. We have known each other for about 25 years and my visit to Tokyo was a good opportunity for us to meet again. At her suggestion, on the day after the conference ended we visited Takahata Fudo-sen Kongo-hi Temple, lunched in a Japanese restaurant, watched a theatre performance, and dined in the restaurant on the 50th floor of a skyscraper.

Počasni članovi (*Honorary Fellows*) ICA-e postali su Evangelos Livieratos iz Grčke i Miljenko Lapaine iz Hrvatske, a diplomu za posebne zasluge (*Diploma for outstanding services to ICA*) dobio je Takashi Morita iz Japana.

Društveni program

Tokio leži u Tokijskom zaljevu, na srednjem dijelu istočne obale otoka Honshu, na ušću rijeke Sumida. Glavnih dijelova Tokija su Ginza, Shinjuku i Odaiba. Tokio je glavni i najveći grad Japana te važna luka. Jedan je od najmnogoljudnijih gradova na svijetu. Centar je japanske i azijske trgovine te industrije. Posjetitelji konferencije mogli su odabratи posjet nekoj od kartografskih institucija ili obilazak značajnih mjeseta u Tokiju ili okolicu. Jedna od mogućnosti bila je posjet pogledu na Tokio (*Tokyo City View at Roppongi Hills*) s platforme za opažanje na 52. katu nebodera (*Observatory Deck*), gdje su smješteni kafić i restoran, suvenirnica, Muzej umjetnosti Mori (*Mori Art Museum*) i Umjetnička galerija Mori (*Mori Arts Center Gallery*). Nakon razgledavanja Tokija s visine slijedila je vožnja brodom po rijeci Sumidi (*River Cruising*).

Svečana večera održana je restoranu Happo-en koji je zasnovan na svim aspektima japanske kulture – tradicionalnim vrtovima, arhitekturi, kulinarskim tehnikama, umjetnosti i glazbi – bitnima za upoznavanje japanske ljepote i kulture. Goste su oduševili gospođa Fuka Tanaka sviranjem na klaviru, Yasukazu Kano flautist sa svojim triom i japanski ples Nihon Buyo u izvođenju Kagurazaka Geisha.

Susret s Emiko Tsutsumi

Emiko Tsutsumi je profesorica na Otsuma Women's University u Tokiju. Poznajemo se oko 25 godina i moj posjet Tokiju bila je dobra prilika da se sastanemo. Na njezin prijedlog dan nakon završetka konferencije posjetili smo hram Takahata Fudo-son Kongo-ji, ručali u japanskem restoranu, pogledali predstavu u kazalištu i večerali u restoranu na 50. katu jednog nebodera.

Hram Takahata Fudo-son Kongo-ji je hram budističke sekte Shingon. To je jedan od najstarijih hramova u području Kanto. Svakog 28. u mjesecu tamo se održava festival na koji dolazi mnogo hodočasnika. Dvoranu Fudo- do počeo je graditi redovnik Ennin prije 1100 godina. Kip boga koji se danas nalazi u toj dvorani težak je više od 1100 kg, a vjerno je reproduciran u razdoblju Heian (794–1185). Na mostu Nio-mon, koji služi kao ulaz u hram, mogu se vidjeti kipovi Kongo-rikishi (Budinih čuvara). Hram Takahata Fudo-son Kongo-ji također je poznat po hortenzijama. Festival hortenzija održava se svake godine od početka lipnja do početka srpnja.

Obred *Goma* posvećene vatre jedinstven je za ezoterički budizam i danas je najprepoznatljiviji ritual koji definira Shingon u Japanu. Potječe iz vedskog obreda Agnicayana i izvode ga svećenici za pojedince, države ili sva živa bića. Vjeruje se da posvećena vatra ima snažan učinak duhovnog i psihološkog čišćenja. Središnje božanstvo u tom ritualu je obično Acala (Fudō Myōō). Ritual se izvodi s ciljem uništavanja negativnih energija, štetnih misli i želja te radi upućivanja svjetovnih molbi i blagoslova. U mnogim hramovima budističke škole Shingon taj se ritual izvodi svakodnevno u jutro i poslije podne. Ceronije većih razmjera često uključuju neprestano lupanje taiko bubnjeva i masovno pjevanje svećenika i praktičara mantere Acale. Plamen može ponекad doseći i nekoliko metara visine. Kombinacija onoga što se vidi i čuje može izazvati trans i stvoriti snažno iskustvo.

Soba je japansko ime za heljdu. Obično se odnosi na tanke rezance od heljdinog brašna ili kombinaciju heljdinog i pšeničnog brašna (*Naganō soba*). Rezanci soba poslužuju se ohlađeni s umakom ili vrući u juhi. Soba može nutritivno dopuniti druge žitarice poput bijele riže i pšeničnog brašna. Tiamin, tj. vitamin B1 koji nedostaje bijeloj riži, sadržan je u sobi. Ona sadrži svih osam esencijalnih aminokiselina, uključujući lizin koji nedostaje pšeničnom brašnu.

Kyōgen je oblik tradicionalnog japanskog kazališta. Razvio se zajedno s Nohom, izvođen je zajedno s Nohom kao međuigra između predstava Noha na istoj pozornici i zadržao bliske veze s Nohom i u današnje doba, pa se понekad naziva Noh-kyōgen. Njegov sadržaj ipak nije nimalo sličan formalnim, simboličkim i svečanim predstavama kazališta Noh; Kyōgen je vrsta komedije, a njegov je glavni cilj nasmijati publiku. Kazalište Noh i Kyōgen pripada UNESCO-voj nematerijalnoj kulturnoj baštini.

Večerali smo u jednom od restaurana firme Tsukasa/Neboke na 50. katu zgrade Shinjuku Nomura. Odatle se pružao lijepi pogled na Tokio u predvečerje. Hrana je bila izvrsna: svježe tuna i jegulja uz salatu sastavljenu od patlidžana i krpica od tune uz začinsko bilje. Sake i japansko pivo dali su konačni doživljaj toj večeri koju neću zaboraviti.

Susret s Kojijem Hasegawom

Koji Hasegawa je profesor kartografije iz Osake. Doputovao je u Tokio da bismo zajedno proveli dva dana, kako je on to nazvao, privatnim postkonferencijskim obilascima. Jedan dan posjetili smo nacionalni park Nikko smješten sjeverno od Tokija, a drugi dan Kamakuru, južno od Tokija.

Nacionalni park Nikkō nalazi se u regiji Kantō, na glavnom otoku Honshū u Japanu. Park se prostire na četiri prefekture: Tochigi, Gunma, Fukushima i Niigata, a osnovan je 1934. godine. Smatra se jednim od najljepših parkova u Japanu i popularno je turističko odredište. Pored svog upečatljivog krajolika, park je poznat po svojim povijesnim budističkim hramovima i šintoističkim svetištima, od kojih su najistaknutiji Nikkō Tōshō-gū i Rinnō-ji. Pripadaju UNESCO-voj svjetskoj kulturnoj baštini.

Kamakura je grad u prefekturi Kanagawa, u Japanu. Iako je danas Kamakura prilično mala, u knjigama o povijesti često se opisuje kao nekadašnja de facto prijestolnica Japana, najnapučenije naselje između 1200. i 1300. godine, sjedište šogunata i namjesništva. Kao primorski grad s

The temple belongs to the Buddhist Shingon sect. It is one of the oldest temples in the Kanto area. A festival is held on the 28th day of each month and is attended by many pilgrims. A monk named Ennin started to build Fudo-do Hall eleven hundred years ago. The statue of the god in the hall weighs over 1100 kg and was faithfully reproduced in the Heian era (794-1185). On Nio-mon Bridge, which serves as the entrance to the temple, statues of Buddha's guards, the Kongorikishi, can be seen. Takahata Fudoson Kongo-ji Temple is also famous for its hydrangeas. A hydrangea festival is held every year from early June to early July.

The *Goma* ritual, dedicated to fire, is unique in esoteric Buddhism, and is the most recognizable ritual which defines Shingon in Japan today. It has its origins in the Vedic Agnicayana ritual and is performed by priests for individuals, the state, or for all living beings. It is believed that the sacred fire has a powerful cleansing effect on the spirit and mind. The central deity in the ritual is usually Acala (Fudō Myōō). It is performed to destroy negative energy, harmful thoughts and desires, and in order to present worldly prayers and blessings. In many schools in Buddhist Shingon temples, the ritual is performed every day in the morning and afternoon. These impressive ceremonies are often accompanied by rhythmic drumming (*taiko* drums) and massed singing by priests and mantra practitioners. The flames can sometimes reach several meters high. The combination of sights and sounds can induce trances and create strong experiences.

Soba is the Japanese name for buckwheat. It is usually used for thin noodles made from buckwheat flour or a combination with wheat flour (*nagano soba*). The noodles are served cold with sauce or hot in soup. Buckwheat adds to the nutritive value of other cereals such as white rice and wheat flour. Thiamine (vitamin B1), which is lacking in white rice, is found in *soba*. It also contains eight

essential amino acids, including lysine, which is absent from wheat flour.

Kyōgen is a traditional form of Japanese theatre. It developed alongside Noh and is performed in a combination of drama with Noh on the same stage. It retains close connections with Noh today and is sometimes known as Noh-Kyōgen. However, its contents are not at all like the formal, symbolic, ceremonial performances of Noh theatre. *Kyōgen* is a type of comedy and its main aim is to make the audience laugh. Both Noh and *Kyōgen* are inscribed in the UNESCO list of intangible cultural heritage.

We had dinner in one of the Tsukasa/Neboke restaurants on the 50th floor of the Shinjuku Nomura building. From there, we had a wonderful view of Tokyo in the early evening. The food was excellent: fresh tuna and eel in a salad with eggplant and tuna flakes with herbs. *Sake* and Japanese beer ended an experience I shall never forget.

Meeting Koji Hasegawa

Koji Hasegawa is professor of cartography from Osaka. He travelled to Tokyo so that we could spend two days together on what he called 'private post-conference tours'. On the first day we visited Nikko National Park to the north of Tokyo, and the next day we went to Kamakura, south of Tokyo.

Nikko National Park is in Kanto region on Honshu Island. It stretches across four prefectures: Tochigi, Gunma, Fukushima and Niigata, and was established in 1934. It is considered one of the loveliest parks in Japan and is a popular tourist destination. Apart from its impressive landscapes, the park is famous for its historical Buddhist temples and Shinto shrines, of which the most prominent are Nikkō Tōshō-gū and Rinnō-ji. They belong to the UNESCO list of world cultural heritage.

Kamakura is a town in Kanagawa Prefecture. Although the town is quite small today, it is described in history books as having been the *de facto*

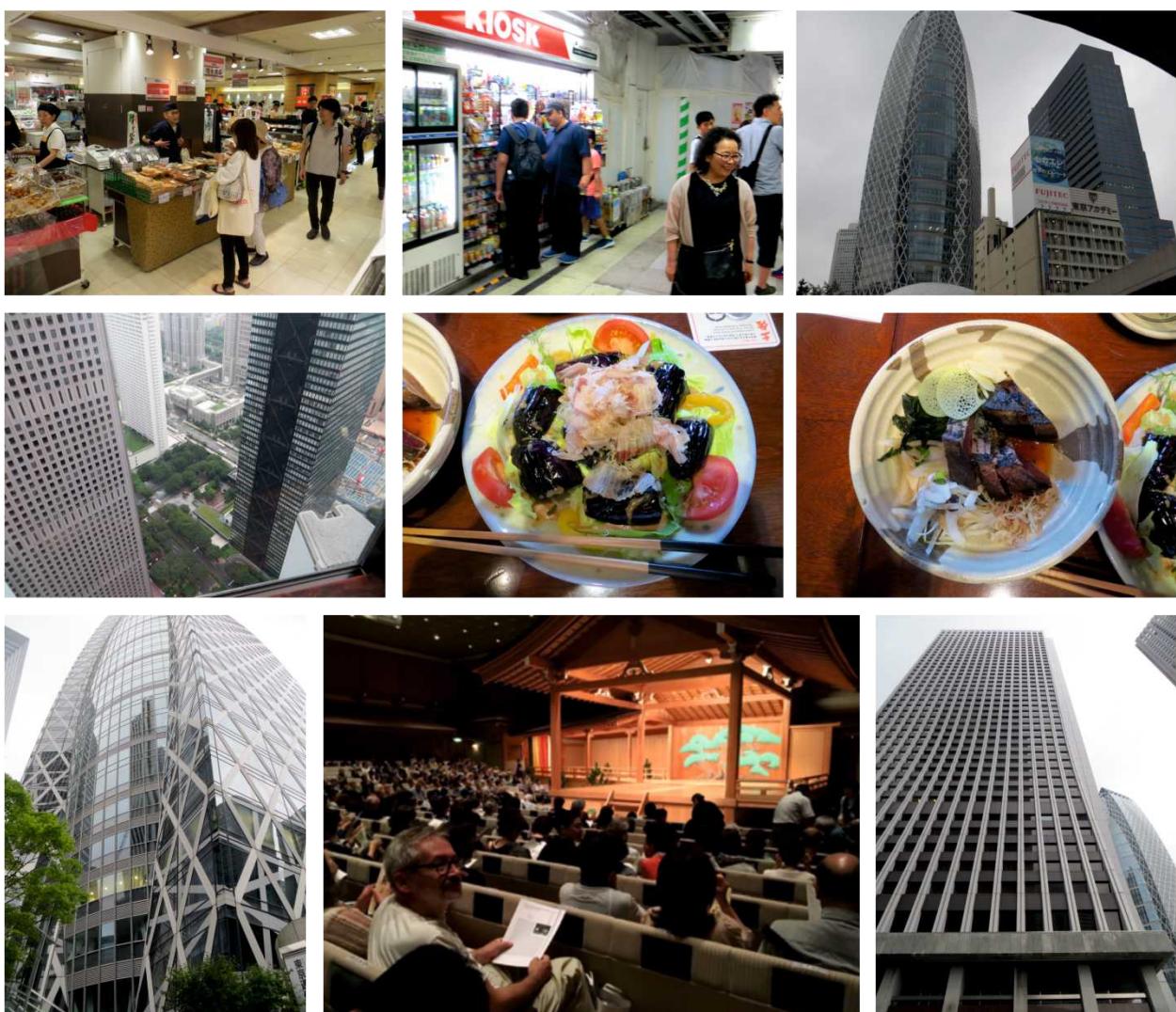
capital of Japan and the most inhabited settlement between 1200 and 1300. It was the seat of the *shogun* and governor. As a seaside town with a large number of seasonal festivals, ancient shrines and temples, Kamakura is a popular tourist resort. It has many historical Buddhist temples and Shinto shrines, of which some, like Sugimotodere, are more than 1200 years old. Kotoku-in, with a monumental bronze statue of Amida Buddha, is the most famous. A tsunami in the 15th century destroyed the temple in which the statue was housed, but the statue survived and is now in the open. This giant Buddha (Daibutsu) is certainly among the rare images which represent Japan in the world's collective thought. Although much of the town was devastated in a huge earthquake in 1923, the temples and shrines which had been established many centuries earlier have been carefully restored. The architectural heritage in Kamakura is almost incomparable, and the town has proposed several of its historical sites for inscription in the UNESCO list of world heritage.

The last three days after the conference, spent with my Japanese friends Prof. Emiko Tsutsumi and Prof. Koji Hasegawa, will remain with me forever and are wonderful memories of my third visit to Japan. Finally, I would like to congratulate the organizers on a successful 29th International Cartographic Conference and 19th General Assembly of the ICA. More information on the conference is available at <http://icc2018.org/>. The 30th International Cartographic Conference will be held in 2021 in Florence.

Acknowledgements

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Miljenko Lapaine ■



Susret s Emiko Tsutsumi / Meeting Emiko Tsutsumi

velikim brojem sezonskih festivala, kao i drevnim svetilištima i hramovima, Kamakura je popularno turističko odredište. Kamakura ima mnogo povijesno značajnih budističkih hramova i šintoističkih svetišta, od kojih su neki, poput Sugimoto-dere, stari više od 1200 godina. Kōtoku-in je s monumentalnim brončanim kipom Amide Bude najpoznatiji. Cunami iz 15. stoljeća uništilo je hram u kojem je nekad bio Veliki Buda, ali kip je preživio i od tada se nalazi vani na otvorenom. Taj je ikonični Daibutsu sigurno među rijetkim slikama koje predstavljaju Japan u kolektivnoj misli svijeta. Iako je velik dio grada devastiran u velikom

potresu 1923. godine, oštećeni hramovi i svetišta, osnovani prije više stoljeća, od tada su pažljivo obnavljani. Arhitektonska baština Kamakure gotovo je neusporediva, a grad je predložio neka od svojih povijesnih mesta za uvrštanje u UNESCO-ov popis svjetske baštine.

Posljednja tri dana nakon konferencije provedena s japanskim prijateljima prof. Emiko Tsutsumi i prof. Kojijem Hasegawom ostat će mi u trajnom sjećanju i lijepoj uspomeni na moj treći boravak u Japanu. Na kraju želim čestitati na uspješnoj organizaciji 29. međunarodne kartografske konferencije i 18. generalne

skupštine ICA-e. Detaljne informacije o konferenciji dostupne su na internetskoj adresi <http://icc 2018.org/>. Sljedeća 30. međunarodna kartografska konferencija održat će se 2021. godine u Firenci.

Zahvala

Zahvaljujem Držanoj geodetskoj upravi i njezinom ravnatelju dr. sc. Damiru Šanteku na finansijskoj pomoći koja je omogućila moje putovanje u Tokio i sudjelovanje na 29. međunarodnoj kartografskoj konferenciji i 18. generalnoj skupštini Međunarodnoga kartografskog društva.

Miljenko Lapaine ■



重要文化財 附・鉄燈籠(南蛮铁燈籠)

仙台藩主伊達政宗侯(62万石)よりの奉納。ボルトガルから鉄材を運んで鋳造した。燈籠の竿の部分に「藤原朝臣政宗」の銘がある。境内には石造101基、銅製17基、鉄製2基、石造五重塔1基の121基の燈籠が現存する。陽明門直下に贈代大名、陽明門大石段下に外様大名から寄進された燈籠が配され、陽明門内にあるのは東福門院寄進の一基のみである。

Toshogu Lanterns

There are 121 lanterns surviving at the Toshogu, of which 101 are made of stone, 17 of copper, two of iron, with one stone five-story pagoda in stone. The lanterns directly beneath the 'Yomeimon' Gate were donated by the feudal lords who fought with Lord Tokugawa Ieyasu at the Battle of Sekigahara, which led to the creation of the Tokugawa Shogunate. Two of these lanterns made of copper were originally imported from Portugal, which were donated by the famous and powerful warlord, Date Masamune. The remaining lanterns further from the Yomeimon Gate were presented by the feudal lords that were defeated by the Tokugawa armies. There is only lanterns inside the Yomeimon Gate, which has pride of place because it was presented by the Empress Tofukuroen (1607-1679).



