International Cartographic Association
Association Cartographique Internationale

Commission Report to the ICA Executive Committee

Commission: User Experience
Date of report: 12 July 2023
Period of report: 08/2019 - 08/2023
Name of reporter: Robert Roth
EC liaison: Terje Midtbø

General Remarks:
The report should focus on major events and generally not exceed 1.5 pages incl. photos and links. Activities to be reported may fall into the following categories, but should either be (co)initiated by your commission or reflect significant commission participation:

Commission/Working Group highlights (e.g. conferences, publications, products & services, awards, etc. and outcomes for the EC to take note)

Roth RE, A Griffin, and H Huang. (accepted) User experience design for mobile cartography. Journal of Location Based Services (this is the editorial for the special issue jointly prepared with Cognitive Visualization and Location Based Services).

Roth RE, A Çöltekin, L Delazari, B Denney, A Mendonça, J Shen, Z Stachoň, and M Wu. (accepted) Making maps & visualizations for mobile devices: Research challenges for mobile-first and responsive cartographic design. Journal of Location Based Services. (this article in the special issue was led by the UX Commission)

Robinson AC, P Kettunen, L Delazari, and A Coltekin. 2023. New directions for the state of art and science in Cartography. International Journal of Cartography (double special issue prepared with Cognitive Visualization and Visual Analytics)

Golebiowska, I., Korycka-Skorupa, J., and Slomska-Przech, K. (2021). Common Thematic Map Types. The Geographic Information Science & Technology Body of Knowledge (2nd Quarter 2021 Edition), John P. Wilson (ed.). DOI: 10.22224/gistbok/2021.2.7, https://gistbok.ucgis.org/bok-topics/common-thematic-map-types

Houtman L and Roth RE, 2021 Mapping for a Sustainable World: QGIS Technical Supplement. University of Wisconsin Cartography Laboratory: Madison, WI. doi.org/10.5281/zenodo.5585547 Online at: https://github.com/uwcartlab/MappingSDGsTechnicalSupplement

Kraak MJ, RE Roth, BA Ricker, A Kagawa, and G Le Sourd. 2020. Mapping for a Sustainable World. New York: United Nations Press. doi.org/10.18356/9789216040468

Stachoň, Kubicek, & Herman. 2020. Virtual & Immersive Environments. In: The Geographic Information Science & Technology Body of Knowledge (Ed: J Wilson). University Consortium of Geographic Information Science.

Roth RE, CM Sack, G Baldrica-Franklin, Y Chen, R Donohue, T Prestby, R Tolochko, and N Underwood. 2020. Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web. University of Wisconsin Cartography Laboratory: Madison, WI. doi.org/10.5281/zenodo.5565480. Online at: https://github.com/uwcartlab/webmapping

Roth RE. 2019. How do user-centered design studies contribute to cartography? Geografie. 124(2): 133-161. (special issue prepared with Cognitive Visualization)

Notable cross-disciplinary events (e.g. with other ICA Commissions/WGs, regional and international communities)

11-12 July 2019, Beijing, China: Workshop on User Experience Design for Mobile Cartography: Setting the Agenda (ICC workshop with Cognitive Visualization and Location Based Services)

13 November 2020 Curitiba, Brazil (online): Usability4All (with Cartography & Children, Maps & Graphics for Blind & Partially Sighted People, and Open Source Geospatial Technologies)

6 May 2021 Madison, WI (online): Workshop on Adaptable Research Methods (with Cognitive Visualization)

13 December 2021 Florence, Italy: Workshop on Immersive Cartography (ICC workshop)

23 June 2022 Nessebar, Bulgaria: Spatial Information for Virtual Environments (ICCGIS workshop)

9 September 2022 Vienna, Austria: Next Generation Cartographers Colloquium (EuroCarto workshop with the German Cartographic Society)

3-5 April 2023 Olomouc, Czechia: ICA Spring Symposium, Atlases Their Design and Use (with Atlases and Map Design)

Notable public events (e.g. invited public speech, Mapathon, TED talks, hackathon, etc.)
(all invited talks were advertised under the ICA / UX Commission)

Roth RE. 2023. User experience design for mobile cartography. Austrian Cartographic Society and Technical University of Vienna, Cartography Research Division. Vienna, Austria: June 1.

Roth RE. 2023. How interactive maps work: The science of cartographic user experience (UX) design. Technical University of Vienna, Cartography Research Division. Vienna, Austria: May 31.

Roth RE. 2023. How interactive maps work: The science of cartographic user experience (UX) design. Masaryk University. Brno, Czechia: April 6.

Roth RE. 2023. Making Mapping for a Sustainable World. Masaryk University. Brno, Czechia: April 6.

Roth RE. 2022. User experience design for mobile-first cartography: Framework and agenda. CyberCartography 2022 Workshop, Association of Geographic Information Laboratories in Europe (AGILE). Vilnius, Lithuania: June 14.

Roth RE. 2022. User experience design for mobile cartography. Austrian Cartographic Society and Technical University of Vienna, Cartography Research Division. Vienna, Austria: May 31.

Kraak MJ, RE Roth, BA Ricker, A Kagawa, and G Le Sourd (all co-presenters). 2021. Mapping for a Sustainable World. First Webinar of the International Cartographic Association. Online: July 14.

Roth RE. 2021. Cartographic design as visual storytelling. Technical University of Vienna, Cartography Research Division. Vienna, Austria (delivered remotely due to COVID-19): May 11.

Roth RE. 2020. Inclusive cartographic design. Federal University Paraná, Joint ICA Commission Workshop on Usability4All. Curitiba, Brazil (delivered remotely due to COVID-19): November 23.

Roth RE. 2020. Theory in cartography: Recommendations & best practices. United Nations, Third Workshop of the Working Group on Geovisualization. New York, USA (delivered remotely due to COVID-19): July 21.

Roth RE. 2020. Cartographic design as visual storytelling. Technical University of Vienna, Cartography Research Division. Vienna, Austria (delivered remotely due to COVID-19): June 9.

Roth RE. 2019. User experience design for mobile cartography. Beijing Normal University, Joint ICA Commission Workshop on User Experience Design for Mobile Cartography: Setting the Agenda. Beijing, China: July 11.

Roth RE. 2019. Designing and conducting user studies in cartography. Nanjing Normal University. Nanjing, China: July 3.

Roth RE. 2019. Research frontiers in interactive cartography and geovisualization. Nanjing Normal University. Nanjing, China: May 24

Educational highlights (e.g. degree programs, MOOCs, lifelong learning courses)

Open Educational Resources (doi publications also listed above):

Houtman L and Roth RE, 2021 Mapping for a Sustainable World: QGIS Technical Supplement. University of Wisconsin Cartography Laboratory: Madison, WI. doi.org/10.5281/zenodo.5585547 Online at: https://github.com/uwcartlab/MappingSDGsTechnicalSupplement

Kraak MJ, RE Roth, BA Ricker, A Kagawa, and G Le Sourd. 2020. Mapping for a Sustainable World. New York: United Nations Press. doi.org/10.18356/9789216040468

Roth RE, CM Sack, G Baldrica-Franklin, Y Chen, R Donohue, T Prestby, R Tolochko, and N Underwood. 2020. Web Mapping: A Workbook for Interactive Cartography and Visualization on the Open Web. University of Wisconsin Cartography Laboratory: Madison, WI. doi.org/10.5281/zenodo.5565480. Online at: https://github.com/uwcartlab/webmapping

Zotero Bibliography on User Studies in Cartography: https://www.zotero.org/groups/928693/uuui/library

UX Commission website: https://use.icaci.org/

Any other sharable experiences

The UX Commission has supported creation of the Next Generation Cartographers working group, including organization of a workshop at EuroCarto 2022, creation of a Discord channel and website, and participation in three follow-up open meetings.

The UX Commission received the third most abstracts for the 2023 ICC and will hold seven paper sessions and a business meeting at the conference.

Upcoming events and planned actions

*8-9 August 2023, Harare, Zimbabwe: Mapping for a Sustainable World (ICC workshop with Sustainable Development)

*September 2024, Warsaw, Poland: Workshop on Analytical Reasoning (EuroCarto workshop with Cognitive Visualization and Visual Analytics; postponed from 2020 due to the pandemic)