ICA Commission on Generalisation and Multiple Representation (2015-2019)

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Chair/Vice-Chairs
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Activities

An overview of ICA workshops and symposiums can be found at
http://generalisation.icaci.org/index.php/prevevents

- Thematic Workshop on building an Ontology of Generalisation for on-demand mapping, 26th to 27th March 2015, Paris, France (~15 participants).
- 18th ICA Workshop on Generalisation and Multiple Representation – jointly organised with ISPRS WG II/2 "Multi n-dimensional Spatial Data Representations, Data Structures and Algorithms", 21st August 2015, Rio de Janeiro, Brazil.
- 2nd NMA Symposium on Generalisation and Multiple Representation, jointly organised with EuroSDR commission "Data specifications", 3-4 December, 2015, Amsterdam, the Netherlands (with 19 presentations from agencies or software providers).
- 19th ICA Workshop on Generalisation and Multiple Representation, 14th June, 2016, Helsinki, Finland, prior to AGILE 2016 (with 13 papers / presentations)
- 20th ICA Workshop on Generalisation and Multiple Representation, 1st July, 2017, Washington, DC, USA, prior to ICC'17 (with 10 papers / presentations)
- 21st ICA Workshop on Generalisation and Multiple Representation, 12th June, 2018, Lund, Sweden, prior to AGILE conference 2018 (with 5 papers / presentations, then a joint afternoon with the co-located VGI workshop)

Figure 1: Participants of the 19th ICA Workshop on Generalisation in Helsinki, 2016.

Publications

- The commission has started the guest edition of a special issue of the International Journal of Cartography on map generalisation. Some papers are still in the review process, but the issue should be published in 2019. 12 papers were first submitted for an abstract selection. Then, 8 of the 9 selected abstracts were extended and submitted to the journal.

- 50 peer reviewed papers were published in the workshops from 2015 to 2019. The papers are all available on the commission website:
  http://generalisation.icaci.org

- The papers published in the 2018 workshop were all submitted and published along with a map or a generalized dataset, all issueing from the same benchmark VGI dataset. The workshop was the first hackathon-like event organised by the commission.
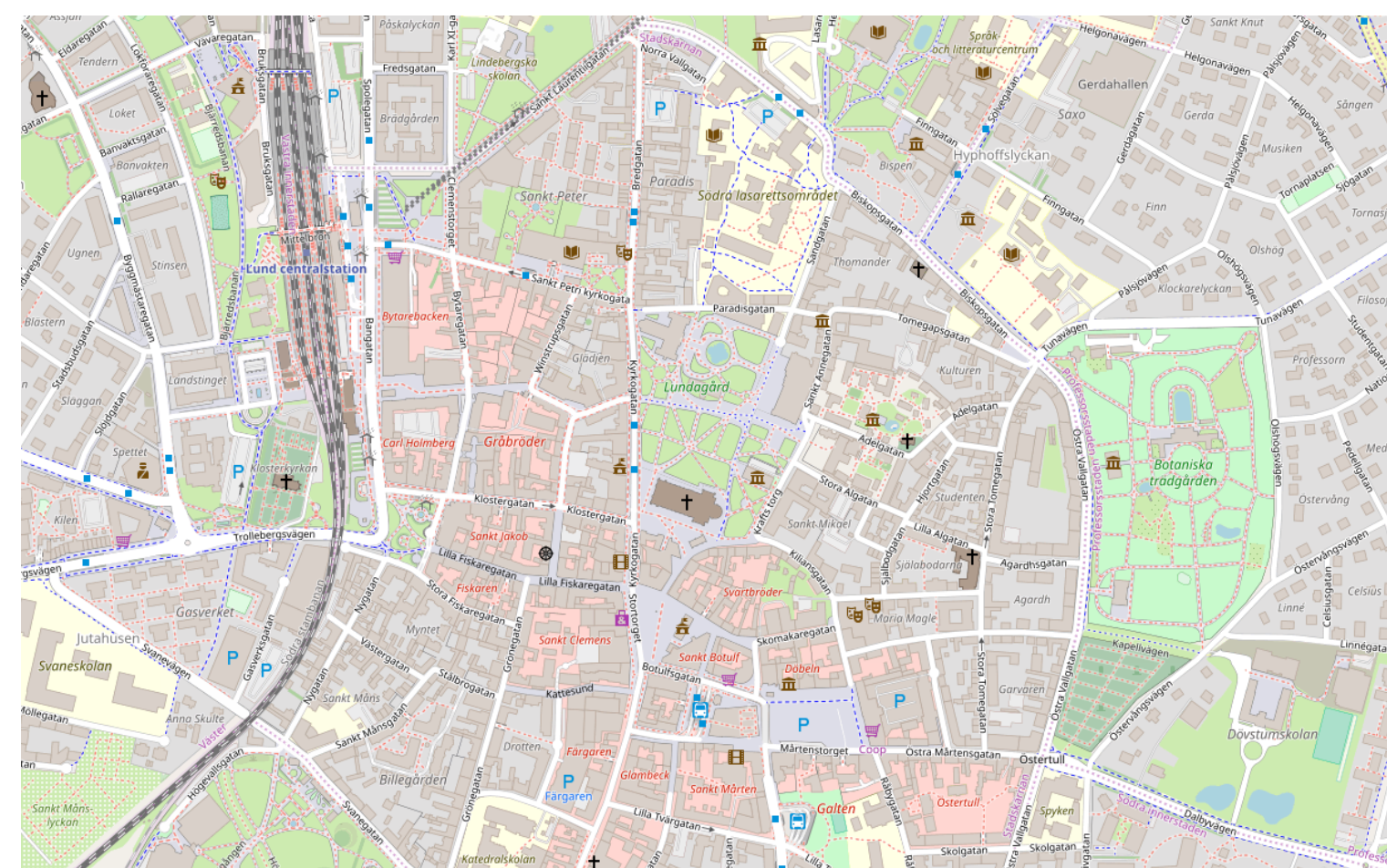

Figure 2: Extract of the OpenStreetMap benchmark dataset published by the commission @OpenStreetMap Contributors

Planned activities

- Joint workshop on "Abstraction, Scale, and Perception" with the commission on Cognitive Issues in Geographic Information Visualization, prior to ICC'19, 15th July, 2019, Tokyo, Japan

Major achievements

1. Generalisation for paper map production keeps on progressing in national or regional mapping agencies, with new automated solutions presented at the 2nd NMA Symposium.

2. An ontology on map generalisation was designed by members of the commission and made available to the community. It provides a shared vocabulary on the concepts used to automate map generalisation and could foster the interoperability on map generalisation processes:
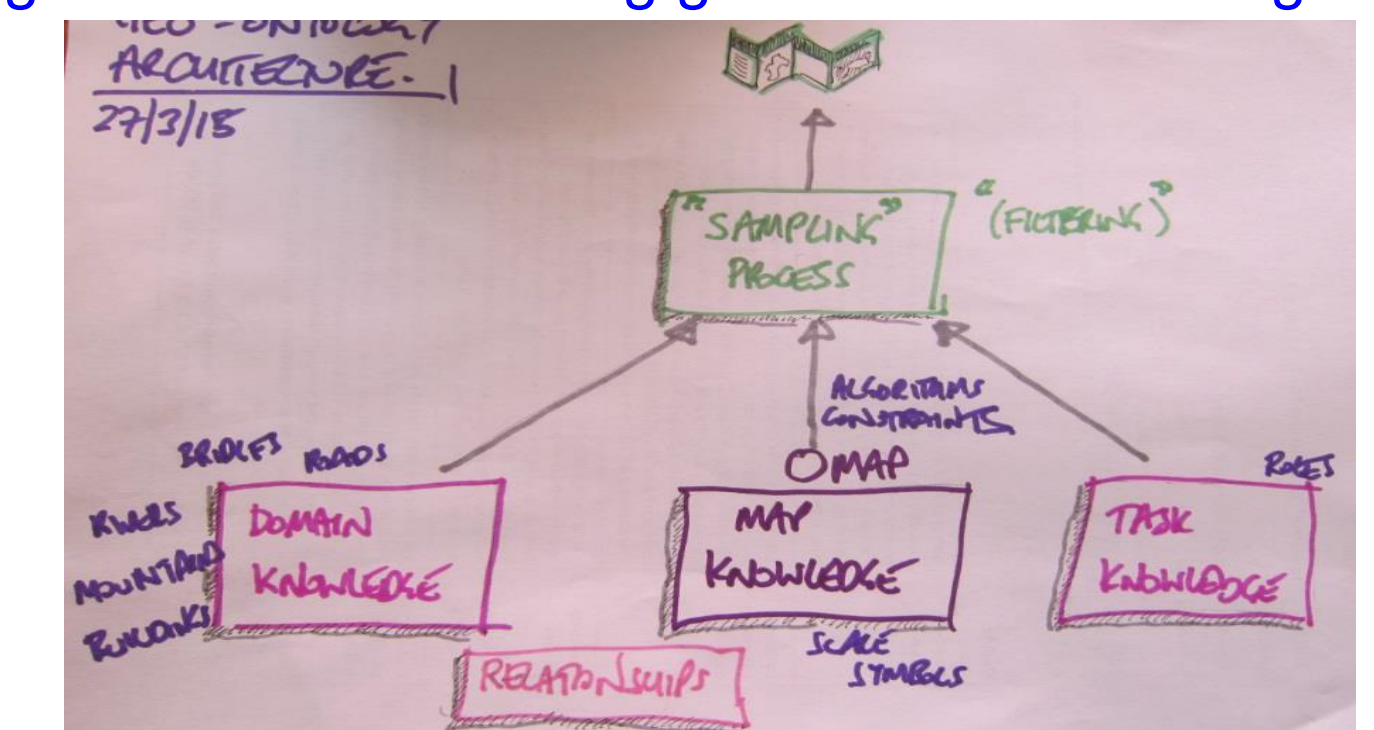http://generalisation.icaci.org/generalisation-ontologies.html

Figure 3: Photograph of the synthesis of the ontology workshop, on which the shared ontology is based.