

Kinga Wenglorz

Reykjavik visit report

On 17<sup>th</sup> October to 3<sup>rd</sup> November I had an honor to visit Reykjavik, Iceland thanks to Centre for Polar Studies. The aim of my visit was to collect data for my Master's Thesis – "Spatial development of Reykjavik, Iceland in the 20<sup>th</sup> century (analyzed by the GIS methods)". In my study I want to describe to what extent urban development of Reykjavik has been limited by physio-geographic factors in the period of 1903 – 2014. To perform the research I had to obtain old topographic maps, geology and hydro maps and city master plans, hence came the idea of visit.

Thanks to Karl Benediktsson I was affiliated to Department of Geography and Tourism (he is the Head of mentioned Department). Karl gave me key to GI lab and access card to Askja (building of Faculty of Life and Environmental Sciences, University of Iceland). The next very important person I met there was Þorbjörg Kjartansdóttir (professor, planning and urban geography at University of Iceland, she is also the Chariman of the Geographical Information Society of Iceland since 1994). Þorbjörg was the person with who I was emailing about my Thesis – she got very interested about my study and accepted project.



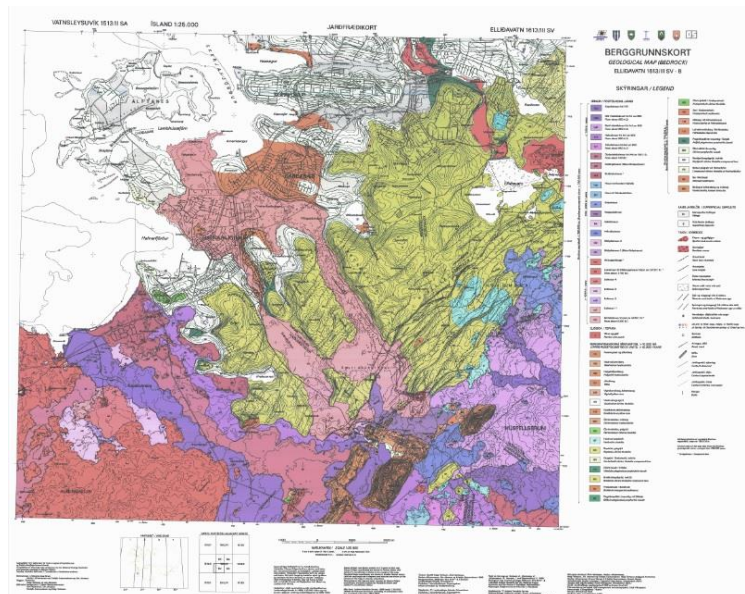
*Askja building*

On the day I met Þorbjörg Kjartansdóttir we went to the lecture of her student – Ursula Zuehlke. Lecture was regarding to Ursula's Master's - "Impervious surfaces in Reykjavik: A watershed-based analysis". After lecture I also met Arna Mathiesen, an Icelandic architect, who just

finished her book “Scarcity in Excess – The Built Environment and the Economic Crisis in Iceland” – the next day I went to see the book presentation and bought one.

Þorbjörg and Ursula gave me advice about whom I should contact to collect data for Thesis. Ursula even made appointment with Managing Director of Vatnaskil, Sigurður Lárus Hólm. *Vatnaskil Consulting Engineers is Iceland’s leading consulting firm in the areas of geothermal reservoir engineering, groundwater hydrology, river hydraulics, surface runoff, air pollution and environmental modeling.* (<http://www.vatnaskil.is/>). I explained the aim of my Thesis and Sigurður mentioned data provided by Vatnaskil, especially the groundwater model. Data is made by Vatnaskil experts but the owner of data is Orkuveita Reykjavíkur (Reykjavik Energy). To obtain groundwater model I met with Hildigunnur Thorsteinsson, director of Research and Development in OR, to get permission. Hildigunnur mentioned about annual Science Day in March where OR ask everyone using their data to present research results.

The next step was obtaining geological map of Greater Reykjavik area. For this purpose I visited ISOR, Iceland GeoSurvey. There I met Guðrún Sigríður Jónsdóttir and Ingibjörg Kaldal who gave me the hydrogeological maps, superficial geology and geology (bedrock) maps of an area of my interests (maps are in 1:25 000 scale, both digital and paper).



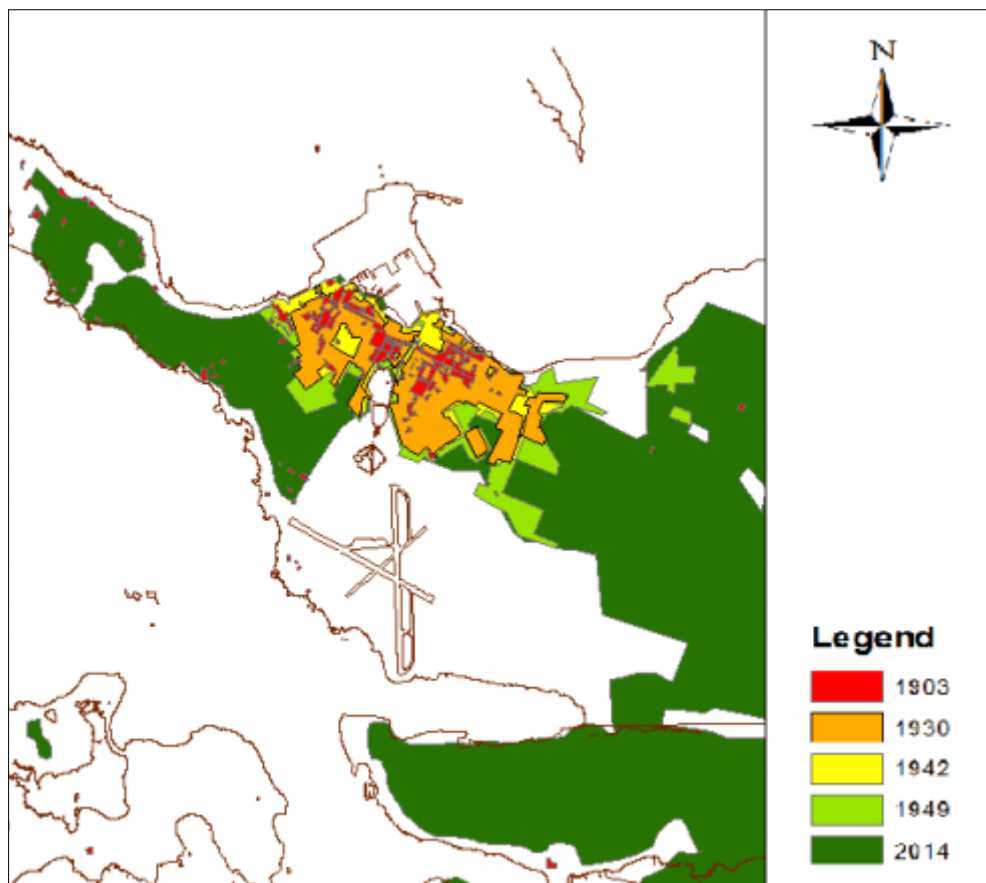
*One of the maps from ISOR*

Very advantageous was the visit in City of Reykjavik, Department of Environment and Planning, where the head of Geographical Information section is Lech Pajdak. He told me how to use Icelandic and Reykjavik’s geoportal and provided some archival maps (from 1930, 1942 and 1952, digital) and LiDAR image of Greater Reykjavik area.

I also wanted to collect maps from Reykjavik master plans, because complete older plans were not accessible in pdf\* format even in Icelandic. For this purpose I contacted Jón Árni Halldórsson from City Planning Office. Obtained maps from plans are for years: 1962-1982, 1984-2004, 1996-2016, 2001-2024.

Very useful were visits in National and University Library of Iceland (Landsbókasafn Íslands – Háskólabókasafn) where I got access to needful books for my study. I reached finally Trausti's Valsson "City and nature - an integrated whole" (it was impossible to get this book anywhere in Reykjavik). Other valuable for me books were available there too.

Thanks to my visit in Reykjavik I was able to create my poster for GIS Day 2014 - "Spatial development of Reykjavik, Iceland in the 20<sup>th</sup> century (analyzed by the GIS methods)" – little part of my Thesis. I vectorized built up areas on old maps to see how city spread.



*Picture from poster – Reykjavik city development*

I assume visit in Reykjavik as very successful – I collected a lot of useful data and meet many important people – most of them want to get sight of my Thesis when it is finished. Moreover, Þorbjörg Kjartansdóttir agreed to be my second promoter.

Some photos from Reykjavik...



*Landing in Iceland*



*View from Reykjavik city pond – Tjörnin*



*Custom black beach*



*North shore – view of Esja (“Reykjavik city mountain”, 914 m)*