## Geovisualization-based solutions in cartography

- 1. Milestones in the history of the thematic cartography and data visualization
- 2. Cartograms 1: history, definitions, classification
- 3. Cartograms 2: results of newest research projects
- 4. Chernoff faces 1: history, definition, principle, classification
- 5. Chernoff faces 2: results of newest research
- 6. Chernoff faces 3: The use of the Chernoff principle in school cartography
- 7. Geovisualization-based solutions in school cartography 1
- 8. Geovisualization-based solutions in school cartography 2
- 9. The use of sound in cartography 1: early experiments on thematic maps, use on multimedia maps.
- 10. The use of sound in cartography 2: maps and atlases for blind and visually impaired people
- 11. Cybercartography: past and current research projects
- 12. `Non map-based' geovisualization: antecedents, current graphic solutions and applications
- 13. Map-based geovisualization: newest solutions and applications developed in current research projects

## Literature:

- Castreghini de Freitas, M. I., 2011. Tactile Cartography in Brazil: Spatial Representation by Visually Impaired Students. Work presented in the Dept. of Cartography and Geoinformatics at ELTE (18 November 2011).
- Coll Escanilla, A. and Pinto Soto, J., 2016. Tactile Cartography: Essential for the Visually Disabled [Online] Available at
- http://mapyear.org/files/wom/18\_IMY\_WoM\_en.pdf [Accessed 26 May 2016]
  Dorling, D. & Fairbairn, D., 2007. Mapping ways of representing the world. Pearson, United Kingdom.
- Dorling, D., 2004. The advantages of cartograms. [Online] Available at http://www.csiss.org/streaming\_video/csiss/dorling\_cartograms.htm [Accessed 15 January 2008]
- Fraser Taylor, D.R., 2005. Cybercartography Theory and practice. Elsevier, United Kingdom.
- Fraser Taylor, D.R., 2014. Developments in the theory and practice of Cybercartography (applications and indigenous mapping) (D.R.F. Taylor & T. Lauriault, eds.), Elsevier, United Kingdom.
- Geomatics and Cartographic Research Centre Carleton University, 2015. Cybercartography [Online] Available at https://gcrc.carleton.ca/confluence/display/GCRCWEB/Cybercartography [Accessed 26 May 2016]
- Lobben, A., 2015. Tactile Maps and Mapping [Online] Available at https://nfb.org/images/nfb/publications/jbir/jbir15/jbir050102.html [Accessed 26 May 2016]
- Mei-Po, K. and Jiyeong, L., 2003. Geovisualization of Human Activity Patterns Using 3D GIS: A Time-Geographic Approach [Online] Available at http://meipokwan.org/Paper/Best 2003.pdf [Accessed 26 May 2016]
- Nöllenburg, M., 2016. Geographic Visualization [Online] Available at http://i11www.iti.uni-karlsruhe.de/extra/publications/n-gv-07.pdf [Accessed 26 May 2016]
- Raisz, E., 1938. General Cartography: Cartographic specialties, pp. 235-265. McGraw-Hill Book Company, USA.
- Reyes J., 2010.Ideas to the use the Chernoff faces in the school cartography. Boletim de Geografia 28:(1) pp. 5-15. Brazil. [Online] Available at http://lazarus.elte.hu/hun/dolgozo/jesus/ma0809/docs/chernoff-ppt.pdf and https://www.academia.edu/8026644/IDEAS\_FOR\_THE\_USE\_OF\_CHERNOFF\_FAC ES\_IN\_SCHOOL\_CARTOGRAPHY [Accessed 26 May 2016]
- Reyes J., 2013. Smartphone-based school atlases? Cartographica: The International Journal for Geographic Information and Geovisualization, 48:2, pp. 126–133, University of Toronto Press
- Reyes J., 2015. Hungarian survey on the use of cartograms in school cartography. International Journal of Cartography, 1:1, pp. 5-17. Taylor & Francis Group, London.
- Simonné Dombóvári E., Reyes J., Gartner G., Schmidt M. and Rohonczi A., 2012 Chernoff faces as an alternative method of representation in schools: Austrian-Hungarian survey. In: Bandrova T, Konecny M, Zhelezov G (Eds.) Proceedings 4th International Conference on Cartography and GIS.
- Tobler, W., 2016. Reprinted articles [Online] Available at http://www.geog.ucsb.edu/~tobler/publications/reprints.html [Accessed 26 May 2016]

Suggested literature:

- Other websites related to the topics included in the course.
- Proceedings of International Cartographic Conferences [Online] Available at http://icaci.org/publications/ [Accessed 26 May 2016]
- International bibliography on the Hungarian website recommended for the study of cartograms: http://lazarus.elte.hu/hun/dolgozo/jesus/otka0810/hivatk.htm