

Cartograms for the presentation of Hungarian statistical data

Reyes Nunez José Jesús
Eotvos Lorand University
jesus@ludens.elte.hu
Hungria

The method of thematic representation named cartogram is one of the youngest methods in thematic cartography. Its origins can be dated to the first years of the 20th century, but the first cartogram-like representations were made after the second half of the 19th century. The terminology related to this method is very diverse: in English, the value-by-area and diagrammatic maps are also used as terms (introduced by Erwin Raisz in 1938). In French language the most generalized denomination is “anamorphose”, while Russian specialists (Bugayevskiy 1987) use the “variavalentnye proyeksii” and “anamorfirovannykh kart” terms. In German “verzerrte Karte” (distorted map) is the most widespread term to identify this method. The Hungarian cartography also adopted this term by adding the adjective "cartogram" to the noun "map" (torzított kartogram-térkép, distorted cartogram-map).

During the 20th century numerous methods were created to make cartograms, beginning from the traditional calculation published by Erwin Raisz in his textbook “General Cartography” in 1938. The use of computer techniques in cartography (mainly of personal computers from the 1980's) gave a new and decisive impulse to the making of cartograms (Tobler, 1983). From the last decade of the past century new, internationally acknowledged methods were developed by cartographers or specialists from research fields near to cartography: Daniel Dorling (Cellular automata machine method and circular cartograms), Sabir Gusein-Zade and Vladimir Tikunov (Gusein-Zade and Tikunov method to construct contiguous cartograms), Michael Gastner and Mark Newman (diffusion-based cartogram).

The present poster includes a set of cartograms of Hungary that were made by using the latter method (Gastner-Newman diffusion-based cartogram). The data represented on these cartograms were selected from databases created by specialists from the Hungarian Central Statistical Office, including economical and social themes. The original cartograms were made using the ScapeToad Cartogram software, which was developed by Swiss specialists within the "Chorogram" project (<http://chorogram.choros.ch/scapetoad/index.php>). Later the cartograms were exported in SVG format to general graphic software (in this specific case to CorelDraw) in the interest of creating a final product with a better graphic quality. Our main aim with this collection of cartograms is to present economical and social data using a method of data visualization less known in Hungary. All the cartograms of this collection can be found and downloaded from the <http://lazarus.elte.hu/hun/dolgozo/jesus/otka0810/peldak.htm> web address.

Present research is developed in the framework of activities of the MTA-ELTE Research Group on Cartography and GIS, financed by the project 68302 of the Hungarian Scientific Research Fund (OTKA).