INTERNET "ATLAS OF CARTOGRAPHIC METHODS" - A STEP TOWARDS FORMALIZING CARTOGRAPHIC METHODS OF PRESENTATION

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Because of wide access to computer analytic and graphic tools, geographic information systems, and data availability, visualization of quantitative data by means of thematic maps is simple indeed these days. Undoubtedly, that fact should be received with joy, as thematic maps are an optimal form of presenting spatial data. They may successfully replace lengthy descriptions, exceeding them in efficiency of conveying information. A thematic may is irreplaceable for presentation of spatial dependencies, which we will surely be unable to show by means of tables or diagrams.

One should enjoy the ever growing amount of thematic maps. However, there is a certain condition to be fulfilled. For the quantitative thematic maps to perform their functions, they must be edited correctly in essence. Their content and form have to be adequate to the role they are to perform.

It will not be a misuse to state that a great majority of published thematic maps is edited in a way that is unwise or not in line with the principles of graphics. One can look for reasons of that in many factors. The first one, and perhaps the most important one is that most often the thematic map is not a "high importance" document, thus the consequence of its incorrect preparation will be merely less efficient provision of information, or slight disinformation. Another factor is the function performed by thematic maps. Oftentimes they are just illustrations, making the text more attractive, introducing some dynamics into the static columns of newspapers. Surely, the consequences of a badly prepared map published in press are not as serious as the consequences of a badly edited large scale topographic map, being – among other things – the basis of complex spatial analyses. A thematic map that is edited fully correctly will hurt merely the most inquisitive users, and professional cartographers. The latter not necessarily so, as various schools of cartography consider various edition assumptions correct.

Lack of specialist knowledge, experience, or just the graphic intuition of authors make some maps leave much to be desired. It is a fact, that such maps are often made by people without cartographic knowledge. It is important, however, for cartographers to define clearly the principles of applying specific methods of cartographic presentation, and also to have those principles reflected, e.g. in graphic solutions applied in GIS-type systems. Wanting to fight for correct application of cartographic methods of presentations, one should begin with lack of their classification and formalization. That, undoubtedly, is one of the challenges for cartographic methodology, important both for traditional cartography, and for interactive cartography, or the visualization of data, understood widely. Also studies on map perception cannot be neglected, as they provide the practical verification of theoretical assumptions; since not everything that is theoretically assumed may "work" in practice.

The aim of our project is to properly arrange the knowledge concerning the application of cartographic methods of presentation, and to connect that with preparation of classification of methods, and formalization of selected quantitative methods. Formalization of methods is then meant to serve for preparation of interactive internet-provided *Atlas of Cartographic Methods*. Our general assumption is to make it easier for all those interested to edit quantitative thematic maps correctly. We do not make use of any available software related to geographic information systems, reminding of the subsequent steps of map development "step by step", in a way which allows to understand the sense of a cartographic presentation.

The Atlas is composed of three parts. Part one consists of papers concerning theoretical base of cartographic methods of presentation. Part two is diagram of proceeding "step by step", allowing a correct preparation of a thematic map. An essential portion of that part is a concise characteristic of five forms of presentation, colloquially referred to as cartographic methods. Thorough knowledge of features of each form of presentation is the basis for correct compilation of maps. Part three comprises a ser of examples of "filling with content" the diagram provided in part two. The results are interactive large-scale illustrations, which provide the forms of cartographic presentation, containing maps made in such a way that their modification is possible, as well as checking whether the image obtained is correct.

For the clarity of reasoning, we introduce in the project the differentiation between *method* and *form*. A method is a manner of proceeding which ensures reaching the expected result, it is going step by step from

data to a map. In our case, the effect, the map is the *form* of presentation, which – due to properties we refer to as diagram or choropleth map. In the project we focus – in a great majority of cases – upon the methods of reaching various forms of presentation, as similar forms may be obtained using different methods. e.g. a dasimetric map.

Knowing the features of data, the map author may, or even should, confront them with the properties of presentation forms. An important issue here seems to be the formalization of cartographic methods. The more formalized the procedures from data to map, the easier the task of making a correct and logical cartographic presentation.