Chapter 13

Cartography and Graphic Design

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Abstract

Between cartography and graphic design there are some theoretical and practical similarities. Both domains use practically the same techniques and their main goal is to communicate effectively and in a useful way. Methodological principles of graphic design seem to be very interesting for cartographers. For example, the principle “form follows function” known not only in graphic design but also in architecture and in industrial design, may be useful in map-making. Furthermore, there are a lot of graphic designs, which are an excellent inspiration for cartographers. Although it is not always possible in cartography, or at least not in every type of map, there is no reason why cartographers could not use graphic metaphor, unconventional design, techniques or composition manner. Results of cartographers’ work should be also of aesthetic value and engraving in one’s memory. In the article the author discusses the most interesting principles of graphic design and some spectacular case studies in the context of cartography, their beauty and effectiveness of knowledge transfer.

Keywords: cartographic design, graphic design, infographics

13.1 Introduction

The relation between the cartographic methods of presentation and the fine arts’ principles is an important issue in cartographers’ scientific interest. Although some cartographers strongly oppose against the inclusion of the fine arts into cartography (Mościbroda 2001) map makers take advantage of achievements and outputs of artists eagerly – for instance J. S. Keates (1996) tried to indicate similarities and
differences in generalisation and composition of maps and paintings. Similarly, artists seek inspiration in cartography; an interesting example of cartographic inspiration of artists is a cover of „The New Yorker” (10.12.2001) prepared by M. Kalman and R. Meyerowitz that presents “New Yorkistan” – city divided into Middle Eastern names.

Several theses about the place of fine arts in cartography could be mentioned. Firstly a map designed by a cartographer with artistic skills will probably be more aesthetic and will be characterised by more successful layout than the one prepared by a person without sense of beauty. Moreover, this map will is more likely to be well-balanced, colours’ selection will be more harmonious and its composition will be more thorough. Secondly, apart from a strictly visual value, map aesthetics influences the perception of the maps, their legibility; hence map aesthetics affects cartographic communication efficiency.

There were many achievements in various aspects of relationships between cartography and the fine arts. For instance, there was a trend in cartography called “the map graphics theory” (Ostrowski 1984) which E. Imhof was the main representative. According to E. Imhof the mapmakers should pay particular attention to map graphics’ improvement and proper composition of maps’ development. Furthermore, he held the view that map design is very similar to graphic design in some respects. In one of his speeches he called cartography a „specialised branch of graphics” (Ostrowski 1984, p. 158). J. Bertin, the other cartographer colligated cartography with graphics. He tried to identify the principles in order to prepare graphics and maps properly to make presentations in a way that could render them correct and useful (Bertin 1970). The rules of proper preparation of graphics were presented in his monumental work “Sémiologie graphique”. In contemporary cartography, exploration of the art element of cartography is the main research task of Art & Cartography Working Group in the International Cartographic Association, which was established especially for this reason.

The usefulness of theoretical considerations about relationships between cartography and the fine arts could be challenged. However, it seems that such considerations are legitimate when their purpose it to indicate those principles of the fine arts which could be used in cartography in practice.

First and foremost it concerns those sub-disciplines of the fine arts in which the transmitting information is one of the main tasks. Undoubtedly, graphic design is that kind of sub-discipline, because visual communication is one of it main aims. This is a feature that makes it closer to cartography and arouses interest of those cartographers who are active in their profession, as well as scientists and theoreticians.