

The scientific objective of this project is to estimate the degree of cartometricity of European city plans issued during the Cold War on both sides of the Iron Curtain. About 120-130 city plans from different European countries will be examined.

The subject of my interest are European city plans, which were developed for the needs of the public, functioning on one or the other side of the Iron Curtain. Maps intended for general use are the most susceptible to restriction and deformation of content. For this reason, they are an interesting source in social studies and critical cartography.

In the research I have undertaken, I combine the cartographic research method with socio-economic geography and a European perspective during the Cold War. The starting point are the properties of a map as pointed out by cartographers and critical cartography representatives. A map not only reflects the location and relations between spatial objects (cartographers point this out), but it is also a result of the cartographer's communicative skills and his subjective choice of presentation methods, as well as of the prevailing ideology, culture, and politics of the country where the map was published (representatives of critical cartography point this out). The categories of objects excluded (masked) or indicated for deformation on maps are variable over time, but they are always formed by places important from the point of view of the authorities. It is the authority that, as part of censorship, imposes secrecy (or deformation) of information about spatial objects by decrees, laws, regulations, international agreements, etc., and then controls the implementation of these recommendations.

From the point of view of the development of cartography, the beginning of the 1960s was important, because it was the time of advanced space exploration under the American program "Corona". At that time, the Americans began to develop topographic maps of the Eastern Bloc countries on the basis of satellite images. It is known from the literature that this situation had an impact on decisions tightening in the Eastern Bloc the protection of spatial data presented on maps for general use. The tightening affected virtually everything related to map accuracy. It was then that recommendations appeared to introduce geometric deformations, i.e. falsifying cartometricity. It is not known, however, if similar falsification of cartometric accuracy of maps for general use took place on the other side of the Iron Curtain or if this part of geographical information was equally important for people in power in western block countries.

The greatest value of the project described above will be the development of a methodology of universal character, which will make it possible to distinguish geometric deformations resulting from natural errors from intentional deformations resulting from the recommendations of the authorities (censorship). These two types of errors will be defined with numerical values by comparing the results of cartometric examination of maps that are certain not to have been intentionally distorted and maps that are known to have had their geometry falsified. This will result in a catalog of error visualizations and geometric deformation indicators.. The determination of the mathematical dimension and visual characteristics of these deformations will facilitate the subsequent interpretation of the results obtained from the study of the cartometricity of European city plans from the Cold War period.

The study will be in two stages. The Cold War city plans will first undergo a preliminary cartometricity analysis, consisting in the determination of parameters, later compared with the above-mentioned catalog (Stage I). If this analysis shows that the map has errors introduced on purpose, it will undergo a detailed analysis (stage II). Detailed analysis will consist in examining the map in terms of scale, area and distance. Visualization of errors will also be done.

The novelty of my research stems from the fact that many researchers have already studied the issue of intentional falsification of maps, including their geometry - D. Wood, M. Monmonier, J. Monnet, B. Konopska D. Borowicz and others, however until now no one has attempted to numerically categorize errors occurring on maps.