Triglav national park historical maps analysis

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Abstract

Triglav national park is one of the oldest and largest national parks in Europe. At least four different countries have claimed and divided the region in the last two hundred years. The park has been on the frontier of empires most of the time and borders delineation has been a constant issue. Cartographical methods and techniques of the area have consequently varied widely in time and space. Nevertheless, the historical maps are commonly the most important database for various spatial analyses of the historical landscapes, urban development, influences of the economy development and wars, toponymes changes, land use etc.

Principal data sources for our study are Austrian military survey maps from the end of 18th century, Italian, Yugoslav and Slovenian maps of scale 1:25,000, from the beginning to the end of 20th century. Major drawbacks are twofold. On one hand, they are systematic and include uncommon object catalogues (map legends), different techniques of cartography (in the same period) and lack of projection and transformation parameters. The other problems are emphasized by rugged terrain and by the common lower importance of details for the mountainous area. Therefore, the area is sparsely measured and less accurately mapped, especially on the oldest maps. Many cartographic details show that the maps are more pieces of art than technical work. The details are not measured or they are succumbed to gross errors. The entire conglomerate of uncertainties is not simple to consider, especially when those old maps used as a rich spatial database within geographical information systems (GIS). We decided to analyse the old cartographic techniques and establish methodology for georeferencing the maps at different scales.

Our GIS-based study assess the usability of historical maps to analyse social processes such as depopulation, deagrarization and urbanization, as well as tourism development and political influences (border changes), through the examination of land use changes as they are a major indicator of human impact on environment. Incorporation of the maps into a GIS will broaden the spectre of possible analysis and make the results comparison of similar studies, undertaken as a part of Interreg IIIB, SISTEMaPARC program, possible.

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