Current Perspectives on Social Mapping of Urban Territories

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Abstract

The article provides insights on the conceptualization of social mapping and its three main types: statistical, anthropological and network-oriented. Each perspective is described in detail and illustrated by examples. Artificial Neuron Networks with a particular interest to self-organizing maps are embedded in the analysis as a cutting-edge technique of social mapping now actively used by interdisciplinary researchers. The authors argue that despite the variety of social mapping techniques, they all have common features such as ordering and grouping of objects based on particular framework and empirical data, flexibility, visibility, citizens' engagement on developing maps. Along with advantages, authors acknowledge such limitations of social mapping as data exclusion, data scale incompatibility and complexity of datasets that are beyond the cognitive abilities of the analyst.

1. Introduction

Social mapping is nowadays actively used in examining social and environmental issues of urban territories and communities. A map acts as an instrument of communication to locals, administrations, developers, and city's stakeholders.

Social mapping is nowadays highly trendy technologies under different social spheres including academic, public sphere (for example, in social work, city planning, education etc.). The popularity of the method across disciplines is connected with the development of information technologies, the popularity of mental mapping techniques, QGIS, PPGIS and an analysis of the distribution of the social problems in the city. Issues have included the employment of social mapping to better capture community values and react to neighborhood renewal programs; GIS as a participatory research instrument; mapping fear and misunderstandings of urban space, environmental and social well-being and mapping etc.

The literature suggests several ways of interpretation of social mapping. First tradition is employed primarily in cartography, geology, geography. According to it, social mapping is method of modeling a graphic and digital image of GIS and geospatial data with the identification of its coordinate and attributive data. Second approach talks about social mapping as a method of modeling, visualization and graphic representation of any spatial localized information according for the purpose to gain knowledge of the represented phenomena. Third, most widely used, tradition incorporates the understanding of social mapping as a method of graphic and semantic description of any material and abstract object which allows consistently describing, group and generalizing of data. It is a method of fixing various features of the territory (social problems, groups' interaction, social well-being, etc.) by means of social maps. Social mapping comprise the complex multiple-factor analysis of any social phenomenon (for example, the level of security on a particular territory, unemployment rate, awareness of environmental problems) that in turn causes creation of multilayered interactive maps.

2. Types of Social Mapping

There are several approaches aiming at studying various aspects of social mapping: statistical, anthropological