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City friendly to life: the social evaluation of the cityscape emotional impacts and mapping the perception of cultural ecosystem services

Abstract

Cultural ecosystem services describe the predominantly non-material benefits that people gain from nature, such as recreation, education, spiritual enrichment, inspiration, cultural heritage, and aesthetic experiences (MEA 2005). They are very important, but still poorly understood as they are commonly intangible and subjective, making them difficult to analyze and quantitatively value alongside biophysical or economic metrics (Pleasant et al. 2014). The understanding many of cultural ecosystem services can be possible by studying the perceptions of local people (Bryan et al. 2010; Plieninger et al. 2013; Pleasant et al. 2014).

The article presents author's method of the cityscape emotional impacts evaluation. Criteria for this evaluation are focused on the social sense of the city friendliness for people's lives. It also presents the results of testing this method among others, as the set of maps depicting the perception of cultural ecosystem services of the city.

For testing the method has been chosen the city of Lublin, which is located in the central-eastern part of Poland, along the Bystrica river, among the loess hills. The city was founded in the thirteenth century and currently has approx. 360 000 inhabitants.

The cityscape emotional assessment impact was performed by fifth-year students of the University of Life Sciences in Lublin specialty the *Landscape Conservation and Design*. Students were divided into five two-person teams. Under the guidance of two tutors they walked the whole area of the city for half a year. During they went around the city, they marked on the map (1: 20 000) single objects and areas with a diameter of approx. 0.5 to approx. 1.0 km, which presented: 1) especial aesthetic values , 2) especial values for spiritual development and reflection, 3) especial predispositions to meet the needs of consumption and leisure facilities. The strength of positive emotions that was felt at these places was evaluated

by the students on a scale of 1 to 5 points. Parallel the same groups of students have indicated individual objects and areas with a diameter of approx. 0.5 to approx. 1.0 km, which were characterized by: 4) spatial disorder, 5) bad condition of the environment, 6) threatened the sense of security. The strength of negative emotions that was felt at these places was evaluated by the students on a scale of 1 to 5 points. Observations and assessments carried out by individual teams were presented in the form of 6 thematic cartograms sets.

The study final effect was a map, which presented multifaceted emotional impact of the cityscape and a map of bonitation its friendliness to life.

The developed method of the social evaluation of the cityscape emotional impacts has proven very useful in the mapping a wide range of cultural ecosystem services process. It was proposed that this group of services defined as "perception services".

Cartograms, which were the result of the research can be used both to promote the city (eg. on its websites) as well as for the planning work focused on shaping the urban space friendly to life.