World Academy of Science, Engineering and Technology International Journal of Architectural and Environmental Engineering Vol:12, No:05, 2018

Land Art in Public Spaces Design: Remediation, Prevention of Environmental Risks and Recycling as a Consequence of the Avant-Garde Activity of Landscape Architecture

Authors: Karolina Porada

Abstract: Over the last 40 years, there has been a trend in landscape architecture which supporters do not perceive the role of pro-ecological or postmodern solutions in the design of public green spaces as an essential goal, shifting their attention to the ' sculptural ' shaping of areas with the use of slopes, hills, embankments, and other forms of terrain. This group of designers can be considered avant-garde, which in its activities refers to land art. Initial research shows that such applications are particularly frequent in places of former post-industrial sites and landfills, utilizing materials such as debris and post-mining waste in their construction. Due to the high degradation of the environment surrounding modern man, the brownfields are a challenge and a field of interest for the representatives of landscape architecture avant-garde, who through their projects try to recover lost lands by means of transformations supported by engineering and ecological knowledge to create places where nature can develop again. The analysis of a dozen or so facilities made it possible to come up with an important conclusion: apart from the cultural aspects (including artistic activities), the green areas formally referring to the land are important in the process of remediation of post-industrial sites and waste recycling (e. g. from construction sites). In these processes, there is also a potential for applying the concept of Natural Based Solutions, i.e. solutions allowing for the natural development of the site in such a way as to use it to cope with environmental problems, such as e.g. air pollution, soil phytoremediation and climate change. The paper presents examples of modern parks, whose compositions are based on shaping the surface of the terrain in a way referring to the land art, at the same time providing an example of brownfields reuse and application of waste recycling. For the purposes of object analysis, research methods such as historical-interpretation studies, case studies, qualitative research or the method of logical argumentation were used. The obtained results provide information about the role that landscape architecture can have in the process of remediation of degraded areas, at the same time guaranteeing the benefits, such as the shaping of landscapes attractive in terms of visual appearance, low costs of implementation, and improvement of the natural environment quality.

Keywords: brownfields, contemporary parks, landscape architecture, remediation

Conference Title: ICULALE 2018: International Conference on Urban Landscape Architecture, Landscaping and

nvironment

Conference Location: Barcelona, Spain Conference Dates: May 17-18, 2018