



Geoplastics and its Significance in Landscape Design

Adilova D., Mukhamadieva N.

*Teachers of the Department, "Design and preservation of cultural heritage objects"
Samarkand state Architectural and Civil engineering institute, Uzbekistan*

Abstract: *This article discusses the issues of geo plastics, their types, plastic features, methods of application in landscape design compositions.*

Keywords: *Terraces, geogrids, geomembranes, geoparks, geoplastic figures.*

Date of Submission: 03-5-2022

Date of Acceptance: 04-6-2022

Geoplasty is one of the methods of plastic processing of the relief by artificially creating its forms taking into account the aesthetic and functional requirements of the object. This method has long existed in landscape art (artificial terraces, piles, hills, amphitheater, dams). The technical potential of the present time allows earthworks to be carried out on a large scale and create the desired relief forms.

A number of problems in creating artificial land volumes:

- **Aesthetics.** They are used when creating hills in the form of steps (pedestals) or viewing platforms towering over the plain in the form of slopes, amphitheaters or chains of hills that separate the sites from the environment and direct the route line in the right direction, closing unwanted objects, and finally, the so-called views, sculptural relief;
- **Functional.** Horizontal planes of all sizes for organized recreation from small playgrounds to complexes of sports and recreation facilities: for entertainment events - amphitheaters, for sledding - wicker slides;
- **Technical.** Improving the comfort level of the territory by introducing wind-proof barriers, flood-proof dams (Werlitz Park in the GDR), sunbathing (insolation), a wind-proof slope-solarium (a device for sunbathing), etc.,

The plastic way of processing the relief is determined through the idea of the project. It can be a recreation of forms that mimic the natural landscape. This method is traditional in both Russian and foreign park construction. It operates to this day (Anapa Children's Park "fairy islands", landscape architect L. Rosenberg, Sections of mountain landscapes of the Main Botanical Park of the Russian Academy of Sciences, the Olympic Complex created in Munich) serve their significance.



In memory parks (on the hill at the entrance to the monument to the Soldier-rescuer in Treptow Park in Berlin, thus, the Hill of Glory in Minsk, which is an observation deck), as well as in children's parks in the form of pyramids, craters, labyrinths (the so-called "game relief" in the park of the residential district of Erkarte of the Federal Republic of Germany), which attract close attention. you can observe regular, geometric shapes. An interesting solution to the complex of various tasks facing the builders of the park is the Kirov MMI Park "weaving hill" in Leningrad. The hill was built on the western tip of Krestovsky Island and played an important compositional role in the park - its high-rise dominant.

From afar, the hill is perceived as a natural height, and up close -as a monumental structure with galleries, stairs and sculpture. The playground of the stadium and the "inner" stands of the hill made it possible to protect visitors from the winds of the Gulf of Finland. Service rooms were located on the outer slopes of the structure. The high ring road that surrounds the stadium bowl serves not only to accommodate guests, but also is a kind of platform (esplanade) for the appearance of the Gulf of Finland, the panorama of the city, the greenery of parks on the islands.

If the choice of the desired style is determined by the idea of the park, then the idea itself largely depends on the nature of the site and the technical feasibility of its implementation. In newly built-up areas, reproduction of the natural landscape is sometimes impractical, as it creates the impression that its artificiality is not needed. In such cases, it is advisable not to supplement artificiality with natural forms, but to use other methods. Ecological and spatial features of the relief determine a special approach to the assessment of the territory allocated for the park, the purpose of which is to choose the optimal variant of its planning solution.



The first stage of the assessment is the definition of territorial units (landscape plots, units, etc.) and the definition of visual connections both within the territories and with the external environment. Territorial units are allocated on the basis of the most typical or significant criteria reflecting the physical, geographical, ecological and functional features of the site. In each case, its own criteria are adopted. At the same time, the same type of space is not an exception to the possibility of adopting a common set for different subjects. So, under equal conditions, small differences in relief should be distinguished. For hills - areas with different slopes, ravines that create different opportunities for their accessibility and development - its morphological composition is distinguished.

In a complex relief, all its forms are distinguished, as well as their parts. For example, when organizing forest parks according to the relief forms for the mountain forests of the Black Sea coast of the Caucasus, the following types of landscape plots are used: mountain ranges, talvegs (or gorges), riverbeds, gentle slopes (up to 10°), moderate (up to $11-20^{\circ}$), steep ($21-30^{\circ}$), very steep (up to 31° and more than ten), hills were discovered. In difficult relief conditions, horizontal plots of all sizes, up to small plots (20-25 m²), are of particular value.

The definition of visual connections means the registration and fixation of visual points, the selection of perceived landscapes from them and the assessment of their significance for the park. Interesting views must be preserved and applied in the structure of the park by removing or separating unnecessary items. Separately, there are areas in which visual rays from different points fall into the trunk of the lens many times. Internal manifestations are characteristic of negative forms of relief, external-for positive.

It is the exteriors, often perceived from the hills, that determine the appearance of the park. The tracing of roads is subject to the technical requirements of the device in accordance with the slope of the terrain, while the route usually passes through interesting observation points to achieve the necessary diversity of the landscape. This includes both external and internal closed compositions, as well as copies of individual large trees, flowering plants, tectonics of open rocks, piles of stones.

A special place in the design of park compositions is occupied by natural stone. The landscape of the park often includes geologically exposed rocks, rocks or areas of natural rocks (for example, "river of stones" in the forest park on Vitosha Mountain in Bulgaria, "chaos" in Vorontsov Park in the Crimea, etc.). The presence of a stone enhances the significance of the relief, emphasizes the

features of the mountain, so even small differences in relief, artfully decorated with stones, look meaningful. At the same time, the thematic interpretation of such compositions can be very diverse.

Literature

1. **A.S. Uralov.** Landscape architecture. "Chulpan". Tashkent, 2014.
2. **D.Isamukhamedova, L.Adilova.** Fundamentals of urban planning and landscape architecture. Tashkent, "Science and Technology", 2010.
3. **E.A.Dobronravova** Landscape design. Expenses. Tashkent. 2009.
4. **I.O.Bogovaya, L.M.Fursova.** Landscape art. Moscow. "Agropromizdat". 1988.