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STONE UTILISATIONS IN LANDSCAPE APPLICATION IN CRAIOVA CITY

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ABSTRACT

Stone is an important material of landscaping due to its physical, technological and mechanical properties. Stone has a lot of color, texture and form. These properties are making stone one of the most used materials in landscaping in Craiova city.

INTRODUCTION

In many ways stones are the bone of the earth. Stone in its many forms is a tangible, useful material that can find a place in every yard. The color selection, texture, cuts and paver size available will cater to any project for landscape. (Kristen Hampshire et al. 2009).

In the beginning, the gardens had a utilitarian purpose, being made up of plants with a food role. Then the gardens take on the role of religious meditation, rest, culture and recreation. (Daniela Posta. 2015).

Stone is a material that is born and evolves in nature as it is detached over time with stable, simple and almost primitive methods. Therefore, together with wood, it is undoubtedly the most suitable material for the formation of forest recreation areas, which are the most widespread means of human contact with nature and its beauties. The use of stone constructions in forest recreation is perfectly in harmony with the natural environment. Thus, people have the possibility to escape from the hectic rhythms of everyday life in forest recreation areas, relax and enjoy the forest through the conveniences offered by the stone constructions. (Vasileios C at al. 2023)

MATERIAL AND METHODS

The main purpose of this study was to reveal the current situation of using stone in the landscaping of Craiova city.

This study was conducted for Craiova area, located in Southwest of Romania (44°20′N, 23°49′E).

The landscaping in Craiova was visited. On this occasion, the inventory of the ornamental constructions made of stone (statues, benches, floors, pavilions, etc.) was carried out.

RESULTS AND DISCUSSIONS

The production of ornamental stones involves two main steps: the extraction (extraction in quarries) and processing (preparation of final products in sawmills and

finishing units). During each of these steps are produced large quantities of waste. These wastes consists of fine residues, of material removed during the cutting and polishing processes, is used as mulch, covering the land. (Leonardo Cattabriga, Roberto Carlos da Conceição Ribeiro. 2012).

The existence of water in soil, its movement, vaporization and air capacity, dissolution processes, microbiological activity, root respiration and plant activity are influenced by stone mulch. (Handan Çakar et al. 2019).

With maximum exploita- tion of their natural texture, stones remain an aesthetic device highly expressive of a subtle yet powerful beauty. (Natsumi Nonaka. 2008)

In the *Sakuteiki concept*, the most important stone of an arrangement should be set first and all the other stones that are to be set afterwards should be set in accordance with this first stone. (Marc Peter Keane. 2008).

Use of stone in architecture has been an enduring and timeless tradition throughout history, withstanding the test of time from ancient civilizations to today's architecture. The durability, versatility and aesthetic appeal of stone make it an exceptional material for creating striking architectural designs. Stone has been used for centuries, as an integral part of architecture since ancient times and its importance still holds true in contemporary architecture being a popular building material today. In this context, this study examines the key features of stone that make it such a vital material for architectural design by exploring the advantages and disadvantages of using stone for architecture. (Serkan Yaşar Erdinç. 2023)

Landscaping with stone creates a framework for movement, visual definition and establishes different use areas in the landscape. A reconnaissance survey carried out within the metropolis reveals that about 65% of landscape projects makes use of stones which is functional and interesting. (Emmanuel Ogechi Mba et al. 2024)

The dry-stone walls act as atmospheric vapor condensers: in the hot and dry season, air temperature increases, as well as the quantity of vapor. So, during the day, when the temperatures increase, the vapor penetrates the hot stones, until the saturation limit. At the end of the day, the air, the soil, the stones begin to get colder, and small drops start to condense, falling down on the ground, under the walls. The absence of mortar allows the permeability of the water. (Giorgia De Pasquale. 2009).

Dry stone walls are more heterogeneous than concrete walls and hosted more lichens than natural rocky walls. (Raoul Manenti. 2014).

The cubic stones are versatile products that combine the aesthetic effect of natural stone with the utility of any paving material. Not only aesthetically pleasing, these products are almost indestructible and require little effort for maintenance, considerably lower as compared to modern asphalt covers. Cubic stone increases that old, historical look of a town by creating an overall image of a harmonious and vibrant space by representing another concept of landscape planning. (Irina Mohora, Anamaria Andreea Anghel. 2019).

Stone can be used in various types of constructions:

- *Statues and statuary ensemble*. The statues and statuary ensembles represent important persons or visions of the authors. (Fig. 1, 2).
- *Bridges.* Bridges are used to provide a crossing way (functional or decorative) over water. It also constitutes an observation point on the arranged space. (Fig. 3)
- *The stone is used "dressing the alleys"*. The functional role of alleys is

organically intertwined with the compositional importance of green spaces. (Fig. 4, 5, 6).

- *Pools, waterfalls and artesian fountains*. Widely used in classical gardens, they impress with the richness of the decoration created by statues, bas-reliefs, vases, etc. and through the masterful merging with the fluid architecture of the jets. (Fig. 7, 8).
- *Stone vases and ornaments for floral arrangements and lawn*. Placed in open, bright spaces have an important role from a compositional, landscape point of view, stones link together the components of the created landscape. (Fig. 9, 10, 11, 12).

Fig. 1. Statuary ensemble
Botanical Garden „Alexandru Buia", Craiova

Fig. 2 Statue Alexandru Macedonski
Botanical Garden „Alexandru Buia",
Craiova

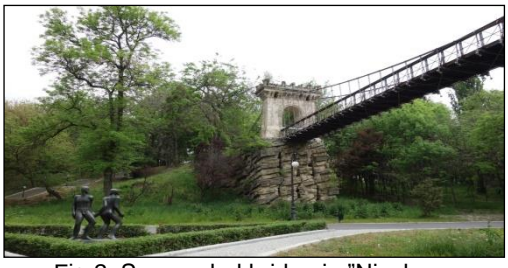

Fig 3. Suspended bridge in "Nicolae Romanescu" Park

Fig. 4. Stone paved alley. Botanical Garden „Alexandru Buia", Craiova

Fig. 5. Stone paved alley.
"Pedagogic" Park

Fig. 6. Stone paved alley.
"Craiovița" District

Fig. 7. Waterfall

Fig. 8. Waterfall

Fig. 9. Floral arrangement decorated with white stone

Fig. 10. Lawn, white stone and marble

Fig. 11. Stone vases

Fig. 12. Stone vases

CONCLUSIONS

Stone has been used for centuries, as an integral part of architecture.

Stone is one of the materials that respond to the functions of urban green spaces, integrating best in urban landscaping projects alongside stone, from an aesthetic point of view.

The stone is used as a binder between several areas achieving a balance between traditional and modern.

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