The Urban Green Structure: Form and Function

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The urban systems are characterized by its components, including their nature, organization, form, function and the interrelationship among each other and with other elements. These components may designate natural elements (such as natural features or green areas) or constructed elements (such as buildings and infrastructures). They have a biophysical component, but also a human dimension, constituted by the people who inhabit and use the urban space.

The Urban Green Structure (UGS) is one of the subsystems that compose the urban system. It comprises areas, values and systems essentials to the urban balance, and includes not only natural values but also cultural values, since the urban environment is strongly influenced by the human presence.

The UGS has a vital importance in the city, presenting multi-functionality, which relates to the three domains of sustainability: ecology, society and economy. These areas also contribute to the organization of the urban system and improve the image of the city.

This work aims to study the relationship between the function and form/structure of the Urban Green Structure, with the analysis of the various typologies of spaces that compose this network (identified according to their function) and its organization in the city (based in its structure and form). It has the UGS of the municipality of Porto as the first case study, which was analyzed according to the social and ecological functions it fulfils, and its organization in the city, based in landscape metrics research.

Keywords: Urban Green Structure, Urban Systems, Multi-functionality, Urban Structure, Landscape Metrics.