

## Technological development and its role in the development of landscape

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### Abstract

The global reality in recent decades has witnessed more technological development in several fields in an integrated manner, and the landscaping field was not far from this development in the various stages of design and implementation .

Starting with raising the project details and dimensions, laser imaging and 3D Scanner techniques came to monitor the smallest details of the topography of the earth, or those programs for drawing the contour of the earth and its levels using the satellite, integrated with them are the ladybug, honey blowguns programs inside the Grasshopper blowgun (which work to link the structural details of the site to the factors The different climatic conditions, and monitoring their impact on it, such as: (rain - wind - sun directions - humidity - temperature) throughout the

year. In the design stage, parametric design techniques come to help develop the design by making design motifs using natural logarithms, in the form of equations , as a source of inspiration, away from colors and external decorations only, but extended to the structural composition of living organisms, or monitoring the formation of groups or swarms, and other techniques that measure the suitability of design to environmental factors have also been integrated with it.

The implementation phase has also received a large share of technological development as information simulation techniques The construction, which provided the designer with many information related to the implementation as information: (Ergonomics - plants and their needs (water, the spaces needed for each plant, the lighting and the extent of its diversity and use) and other information that was difficult for the designer to know all of, and has an important role in the quality of the design.

### key words :

BIM Design ,Parametric Design, Landscape Design, Nature Inspiration , Fabrication