Environmental Science approach of the 3rd millennium and impact on the field of industrial design

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Abstract:

The natural environment and the many creatures it contains represent a major source of inspiration for industrial designers. Creativity has many sources, and the most important of these sources is nature. But it must be used as a creative force. Studying models that include events and shapes that occur regularly in nature is the gateway to sustainable design trends.

And in light of the environmental awakening that prevails in the world recently, the environment is no longer just a mere source from which the designer derives his ideas and solutions to various design problems, but is reflected in the life cycle of the product as a whole and the selection of its structural elements and the energies used in its operation.

The current research aims to study in detail these environmental sciences (Ecology - Ethiology - Bionics - Biomechanics - Ecomimecs - Ecomimicry - Biomimicry) and their relationship to the field of designing products and their various applications. To achieve this, the researcher followed the descriptive analytical approach.

The most important findings of the research results is the emphasis on the need to benefit from modern environmental sciences and place them within the list of basic and complementary sciences for industrial design because of their impact on deepening the thought and skill of the industrial designer in Egypt to design sustainable (environmentally friendly) products. The study also presented a model for the relationship between environmental systems and industrial design and the possibility of benefiting from the new environmental approaches to design in developing industrial design patterns and systems and creating new horizons for them.

Keywards:
industrial Design -Ecology- Bionics -Ethiology -Biomechanics - Ecomimecs -Biomimicry - Ecomimicry.

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