

Biomimetic Architecture from the Inspiration by Nature to the Innovation of the Saharan Architecture

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Abstract : Biomimicry is an old approach, but in the scientific conceptualization is new, as an approach of innovation based on the emulation of Nature, in recent years, this approach brings many potential theories and innovations in the architecture field. Indeed, these innovations have changed our view towards other Natural organisms also to the design processes in architecture, now the use of the biomimicry approach allows the application of a great sustainable development. The Sahara area is heading towards a sustainable policy with the desire to develop this rich context in terms of architecture, because of the rapid evolution of the architectural and urban concepts and the technology acceleration in one side, and under the pressure of the architectural crisis and the accelerated urbanization in the Saharan cities on the other side, the imperatives of sustainable development, ecology, climate adaptation, energy needs, are strongly imposed. Besides that, the new architectural and urban projects in the Saharan cities are not reliable in terms of energy efficiency and design and relationship with the environment. This article discusses the using of biomimetic strategy in the sustainable development of Saharan architecture. The aim of the article is to present a synthesis of biomimicry approach and propose the biomimicry as a solution for the development of Saharan architecture which can use this approach as a sustainable and innovation strategy. The biomimicry is the solution for effective strategies of development and can have a great potential point to meet the current challenges of designing efficient for forms or structures, energy efficiency, and climate issues. Moreover, the Sahara can be a favorable soil for great changes, the use of this approach is the key for the most optimal strategies and sustainable development of the Saharan architecture.

Keywords : biomimicry, Sahara, architecture, nature, innovation, technology

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