

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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بالرسالة صفحات
لم ترد بالأصل





Faculty of Engineering
Department of Architecture

**BEYOND THE PHILOSOPHY OF BIOMIMICRY IN ARCHITECTURE:
A MODEL TO SHIFT FROM THEORY TO PRACTICE**

A thesis submitted as part of the requirements to obtain the degree of Doctor
of Philosophy in Architectural Engineering

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بسم الله الرحمن الرحيم

"إِنَّ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ وَاخْتِلَافِ اللَّيْلِ وَالنَّهَارِ لَآيَاتٍ لِّأُولِي الْأَلْبَابِ"

صدق الله العظيم

سورة آل عمران



*'From my designer's perspective, I ask: Why can't I design a building like a tree?
A building that makes oxygen, fixes nitrogen, sequesters carbon, distills water,
builds soil, accrues solar energy as fuel, makes complex sugars and food, creates
microclimates, changes colours with the seasons and self-replicates.
This is using nature as a model and a mentor, not as an inconvenience.
It's a delightful prospect...'*

(McDonough and Braungart, 1998)

STATMENT

This thesis is submitted to Ain Shams University for the degree of Doctor of Philosophy in Architecture.

The work included in this thesis was accomplished by the author at the department of Architecture, Faculty of Engineering, Ain Shams University, during the period from September 2015 to March 2020.

No part of this thesis has been submitted for a degree or a qualification at any other university or institute.

Date: 22nd March 2020

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