



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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MONA MAGHRABY



**PATTERNS OF EXPERIMENTATION AND RE-
EXPERIMENTATION: INNOVATIVE APPROACHES
FOR AFFORDABLE HOUSING IN THE 21ST CENTURY**

By

Menatalla Mohamed Abdel-Latif Mohamed Ramadan

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
Architectural Engineering

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
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Title of Thesis:

Patterns of Experimentation and Re-experimentation: Innovative Approaches for Affordable Housing in the 21st Century

Key Words:

Innovation; Experimentation; Re-experimentation; Affordable Housing;
Experimental housing

Summary:

One of the most critical problems in Egypt is the need for affordable and adequate housing, which necessitates rethinking of unconventional solutions. Therefore, it is important to explore innovation and to investigate the role of experimentation and re-experimentation as ways for innovative thinking. The research aims to examine the possibility of housing experimentation and re-experimentation to propose unconventional approaches in dealing with affordable housing. The study runs into two lines: the relation between innovation and experimentation crossing the lines with housing costs and patterns of housing experimentation. The different patterns of experimentation are represented by three case studies. In this part, the process and its concrete application are analyzed in each case informing different approaches for experimentation in housing with specific emphasis on special social groups with affordability needs. Based on the literature review and the case studies analysis, a set of recommendations are formulated for the local context.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

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Dedication

This thesis is wholeheartedly dedicated to my beloved parents, who have been my source of strength throughout the long journey, who continually believed in me and who gave me physical and psychological support.

Acknowledgments

First of all, I would like to express my deepest gratitude to Allah. I could not have accomplished any of this without Allah's guidance and blessings. As the Prophet Muhammad said "*He who does not thank people, does not thank Allah*", I would like to express my sincere gratitude to all caring and supportive people around me.

I would like to start by thanking my parents for their pray and unconditional support. Also, I would like to thank my special aunts for their understanding and support.

Of course, I was very lucky to have Prof. Aly Gabr as my advisor, from whom I have learnt a lot from. I really appreciate all the time and effort he gave to enrich this research.

I would sincerely like to thank Prof. Sahar Attia and Dr. Sherin Gammaz for giving me the opportunity to receive a scholarship for a month from DAAD in order to carry out a research visit to Hamburg that really helped me a lot in my research.

This work was supported by the REAP "Resource Efficiency in Architecture and Planning" master's program at HafenCity University. In this regards, I would like to give a special gratitude to Prof. Dr.-Ing. Wolfgang Dickhaut, Dean of studies for this master's program, for his support which facilitate visiting the city science lab. Also, I would like to express my deepest appreciation to Maya Donelson, research associate at HafenCity University, who provided me with a continuous follow up throughout the research visit. Furthermore, I would like to acknowledge Arch Joachim Reinig, Dr.-Ing. Jörg Rainer Noennig and Arch Cornelius Voss who supplied me with the required material and information. Also, special thanks to Eng. Nihal Abdelgawad and Eng. Asmaa Saleh for their help throughout the research visit.

Finally, last but not least, I am also grateful to my dear professors and colleagues who motivated me, and were generous enough to share with me useful advice and information throughout the process.

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