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AFFORDABLE HOUSING IN HISTORIC CAIRO: CASE STUDY OF AL DARB AL AHMAR AREA

By

Mustafa Nagy Elsherif

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
URBAN DESIGN - Revitalization of Historic City Districts

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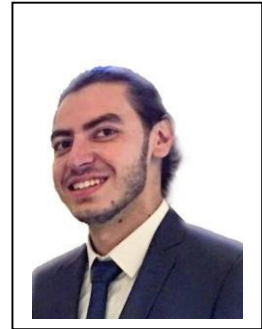
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Title of Thesis:

**Affordable Housing in Historic Cairo:
Case study of Al Darb Al Ahmar area**

Key Words:
Affordable; Infill housing; Diversity; Healthy society

Summary:

Al Darb Al Ahmar district is suffering from population decrease due to low life quality and bad building conditions. Whether these bad building conditions are intentionally done to sell and demolish the building or not, they eventually lead to a sort of social instability in the district. Hence, this research studies the hypothesis that providing affordable housing should help stabilize the society through meeting its needs while fitting within the surrounding context.

The research finally reaches a housing strategy as well as an affordable housing prototype to be repeated in different land types. The research then recommends further development that should help in the rehabilitation process.

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.

Name:

Date:

Signature:

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Table of Contents

DISCLAIMER	I
ACKNOWLEDGMENTS.....	II
TABLE OF CONTENTS	III
LIST OF FIGURES.....	V
NOMENCLATURE	VII
ABSTRACT	VIII
CHAPTER 1 : INTRODUCTION	1
1.1. BACKGROUND.....	1
1.2. RESEARCH PROBLEM.....	1
1.2.1. History of the problem.....	1
1.2.2. Problem indicators.....	2
1.3. HYPOTHESIS.....	3
1.4. METHODOLOGY	3
1.5. ORGANIZATION OF THE THESIS.....	4
CHAPTER 2 : LITERATURE REVIEW	7
2.1. INTRODUCTION: HOUSING AS A HUMAN RIGHT	7
2.2. THE CONCEPT OF AFFORDABLE HOUSING	7
2.3. SOCIAL HOUSING AND AFFORDABLE HOUSING.....	8
2.4. CONTEMPORARY THREATS TO AFFORDABILITY	8
2.5. CASE STUDIES : HOUSING IN HISTORIC DISTRICTS	9
2.5.1. Society hill, Philadelphia, USA.....	9
2.5.1.1. Background:	9
2.5.1.2. Phases of Development and Deterioration.....	9
2.5.1.3. Vision	10
2.5.1.4. Administrative procedures:.....	10
2.5.1.5. Redevelopment plan in practice:	10
2.5.1.6. Results	11
2.5.1.7. Conclusion.....	12
CHAPTER 3 HOUSING IN AL DARB AL AHMAR	13
3.1. SITE ANALYSIS	13
3.1.1. Study location.....	13
3.1.2. Historic background	14
3.1.3. Administrative division	16
3.1.4. Ground figure plan	16
3.1.5. Land use.....	17
3.1.6. Crafts distribution.....	18
3.1.7. Empty land plots.....	20
3.1.8. Building Typology.....	21
3.1.9. Public Space	22

3.2.	ECONOMIC LEVELS IN RELATION TO MONTHLY INCOME	22
3.3.	SOCIO - ECONOMIC SITUATION.....	23
3.4.	SUMMARY.....	25
3.4.1.	Opportunities and Challenges.....	25
CHAPTER 4 PROPOSED HOUSING STRATEGY		27
4.1.	VISION	27
4.2.	OBJECTIVES	27
4.3.	HOUSING AFFORDABILITY IN PRACTICE	27
4.3.1.	Unit price.....	27
4.3.2.	Payment plan	28
4.3.3.	Incremental housing	28
4.4.	HOUSING STRATEGY	28
4.5.	ADMINISTRATIVE PROCEDURE.....	31
4.5.1.	Partnership.....	31
4.5.2.	Funding.....	31
4.5.3.	Execution measures	31
4.6.	CONCLUSION.....	31
CHAPTER 5 MIXED HOUSING PROTOTYPE		33
5.1.	LOCATION SELECTION.....	33
5.2.	DESIGN PRINCIPLES.....	36
5.3.	DESIGN PROGRAM	36
DISCUSSION AND CONCLUSIONS.....		49
FURTHER DEVELOPMENT:		49
REFERENCES		51
APPENDIX A: EMPTY LAND PLOTS ANALYSIS		53

List of Figures

Figure 1 Bayt Madkour, Source: Hazem Khaled	2
Figure 2 Bad buildings conditions in ADAA, Source: Author	3
Figure 3 High rise buildings adjacent to historic two floors houses in the Citadel street, Source: Author.....	3
Figure 4 Research methodology, Source: Author	5
Figure 5 Components of housing affordability, Source: Majale et al. (2011:11).....	7
Figure 6 New houses blend with historic ones at Delancey street	11
Figure 7 The proposed residential society hill towers after construction.....	11
Figure 8 Contrast between high rise new building and restored historic houses	11
Figure 9 Al Darb Al Ahmar (highlighted in yellow) in relation to historic Cairo's world heritage site. Source: URHC project – 2011.	13
Figure 10 Ibn Tulun Mosque, Source: Etltravel	14
Figure 11 Bab Zuweilah, Source: Author.....	14
Figure 12 Historic Development of Cairo, Source: Andre Raymond, Cairo, maps, Illustrated by Author.....	15
Figure 13 Ground Figure Plan of ADAA. Source: Author.....	16
Figure 14 Land use plan in ADAA. Data source: URHC project 2018. Illustrated by Author.....	17
Figure 15 Crafts distribution in ADAA, Source: Author	19
Figure 16 Craftsman working on a metal lantern, source: Christopher Wilton Steer. ...	19
Figure 17 A cordwainer (shoe-maker) in the markets of ADAA. Source: Christopher Wilton-Steer	19
Figure 18 An artisan stitching a new design. Source: Christopher Wilton-Steer.....	19
Figure 19 Empty land plots analysis. Data source: URHC project. Illustrated by Author	20
Figure 20 Building Typology in ADAA, Source: Shuhayb, Dina. Error! Bookmark not defined.	
Figure 21 Children play and women sit in front of their houses only in the deepest pockets with low connectivity.	Error! Bookmark not defined.
Figure 22 Craftsmen like to work outside their workshops in daylight	Error! Bookmark not defined.
Figure 23 Street is used as a parking for means of goods transportation.	22
Figure 24 Shop owners use streets to display goods.	22
Figure 25 Population change in 2006 and 2017. Source: CAPMAS 2006, 2017.....	23
Figure 26 Comparison between unemployment rates in 2006 and 2017. Source: URHC project 2018	23
Figure 27 Prevailing economic activities in ADAA in 2006 and 2017. Source: URHC project 2018	Error! Bookmark not defined.
Figure 28 Percentages of residents based on their length of residence in ADAA... Error! Bookmark not defined.	
Figure 29 Interior of Wakala Qansuh al- Ghawri, Source: archnet.org	29
Figure 30 Plan of Wakala Qansuh al- Ghawri, Source: archnet.org	29
Figure 31 Housing strategy in ADAA, Source: Author	30
Figure 32 Proposals for small land plots, Source: Author.....	30
Figure 33 Map showing land plot (highlighted in red) in relation to .. Error! Bookmark not defined.	

Figure 34 Selected land plot in relation to surrounding streets	Error! Bookmark not defined.
Figure 35 Ayyubid Wall along Burg Al Zafr Street. Source: Author .	Error! Bookmark not defined.
Figure 36 The view of Al Azhar Park from site, Source: Author .	Error! Bookmark not defined.
Figure 37 Sidi Sahl El Sonoury mosque, Source: Author	35
Figure 38 Buildings adjacent to site, Source: Author.....	35
Figure 39 The pedestrian path separating the national youth club and the Ayyubid Wall, Source: Author.....	Error! Bookmark not defined.
Figure 40 Prototype ground floor plan in relation to the surrounding context, Scale 1:500, Source: Author	Error! Bookmark not defined.
Figure 41 Spatial analysis of typical floor plan. Source: Author	38
Figure 42 Proposed furniture layout for typical floor plan, Source: Author	39
Figure 43 Planned phases of construction for incremental housing	40
Figure 44 Design variations allowed by modular design, Scale 1:500. Source: Author	41
Figure 45 Rendered Elevation of the prototype	Error! Bookmark not defined.
Figure 46 Main Section of the housing prototype in relation to the Ayyubid Wall and Al Azhar park	42
Figure 47 Different types of openings offer self- expression for residents of the building.....	42
Figure 48 3D shot of the proposed prototype as seen from Al Azhar Park side, Source: Author.....	43
Figure 49 Aerial Shot of the prototype within context, Source: Author	Error! Bookmark not defined.
Figure 50 The intervention in the pavement of Burg Al Zafr street, Source: Author	44
Figure 51 The commercial path offered at the ground floor of the housing prototype, Source: Author.....	44
Figure 52 Contextual Model scaled 1:500 showing the housing prototype and its relation to the surrounding context, Source: Author	45
Figure 53 Eastern Elevation of the physical model, Source: Author	46
Figure 54 North-Eastern Elevation of the architectural physical model, Source: Author	46
Figure 55 Shot of the Architectural Physical Model showing implementation of different opening types, Source: Author	47

Nomenclature

ADAA: Al Darb Al Ahmar.

CAPMAS: Central Agency for Public Mobilization and Statistics

URHC: Urban Regeneration Project for Historic Cairo

NOUH: National Organization for Urban Harmony

PRA: Philadelphia Redevelopment Authority

OPDC: Old Philadelphia Development Corporate

Abstract

The population of Al Darb Al Ahmar has been gradually decreasing over the past years. This is mainly due to migration of residents escaping low life quality and lack of services in the district. Moreover, house owners are selling their properties to contractors who demolish historic houses of value in order to construct higher residential buildings. However bad the situation may seem, a demand for housing is noticed.

The research explores the hypothesis that providing affordable housing that meets people's needs and fits within context should contribute to stabilizing the society as a part of the revitalization process.

The main purpose of this paper is to develop a housing strategy for the district. An affordable housing prototype should then be proposed in order to initiate the development plan. This is done through analysis of the current situation in ADAA to better define problems and challenges. Then through site visits, an available land plot in Burg Al Zafar Street is selected to host the prototype, which should be repeated in different land areas and types.

The research helped to develop an overall strategy for housing distribution around the district relating to locations of local crafts. The strategy is deprived through a vision and defined objectives. Measures relevant to affordability are proposed such as payment plan and unit price. Then, a program for the housing proposal as well as design principles are defined to be followed. The prototype puts the design principles into application, targeting issues like modularity, spatial planning and privacy in the historic city. Finally the research recommends further development measures.

Keywords: Infill housing, Affordability, Compactness, Diversity, Healthy society

Chapter 1 : Introduction

This chapter provides an overview of the problem of housing in the case study area, stating the research problem and its indicators. The introduction then explains the objective of research as well as the methodology used to reach it. It presents the hypothesis studied through the next chapters.

1.1. Background

Al Darb Al Ahmar is an urban cluster in the heart of Cairo, hosting numerable buildings of historic value. The value of this district does not only include religious buildings, but also commercial and residential buildings with distinctive architectural style. The district is considered one of the oldest local districts in Cairo and has always hosted local crafts. This explains the interest in the district which is currently undergoing a huge rehabilitation project. However, this does not necessarily mean that ADAA is at its best condition.

1.2. Research problem

The study claims there is social instability in Al Darb Al Ahmar area, which leads the residents to abandon the district. The following points provide a further explanation showing indicators and proofs behind this claim.

1.2.1. History of the problem

In the eighteenth century, landlords always faced the challenge of protecting their properties for the coming generations of their families. They hence documented their lands and buildings as endowments. This is a system that allows landlords to keep their lands, while its revenue is divided as follows, one part is used for maintenance of charitable religious institutions such as mosques, Madrasa's and Sabeel's, while the other part of income goes back to the owners' family. This system helped keep most of the area's fabric in its good, original condition.

However, this situation changed by the end of the nineteenth century. This is when Ministry of Endowments was established in Egypt. While the establishment of the Ministry should have allowed for a more systematic management of properties, most of the properties' revenue was used by the ministry and a small part remained for the owners and the maintenance of their historic buildings. Moreover, with the new generation of owners inheriting the properties, they had problems providing the needed care for their properties. New owners either could not agree on decisions related to maintenance or intentionally left their property to decay, in order to demolish it afterwards and sell the land plot for high price.

Starting from 1952, new laws controlling rents were enforced, decreasing the rent base to 65% of its value. Rents were almost fixed and no longer followed supply and demand logic. This aggravated the problem as many owners lost interest in their buildings, which needed periodic maintenance and did not give back as much revenue anymore. Buildings started to deteriorate as structural wooden elements decayed, walls cracked and ceilings collapsed.

1.2.2. Problem indicators

Demolition of historic buildings in Al Darb Al Ahmar is considered one indicator of the social instability problem. In 2014, three historic buildings were partially demolished after a contractor purchased the properties. These buildings are Bayt Madkour, Al Sheikh Al khureiby mausoleum and Bayt Al Mohandes. This was not the only incident of its kind.

Bayt Madkour, one of the buildings that were demolished in the mentioned incident (figure 1), was one of the most important buildings in Souk Al Selah division in ADAA. The building once belonged to one of the princes that lived in Cairo, It is said to belong to the Mamluke era in Egypt. It had the typical Islamic architecture of residential houses, consisting of four buildings divided by courtyards. The elevations had distinctive wooden elements. The house was hence registered as a heritage building for its historical and architectural value. However, in 2011, the buildings' elevation caught fire leading to the destruction of the wooden arches that once marked the building. It then downgraded and was permitted to be demolished.



Figure 1 Bayt Madkour, Source: Hazem Khaled

Due to low life quality in the district, as well as bad building conditions (figure 2), many residential buildings are evacuated for demolition. While the evacuated residents cannot afford living in the district anymore, they end up adding to informal housing. Those who can afford living in the district would then live in high rise dense concrete

blocks (figure 3). As a result of these conditions, the overall population of ADAA gradually decreased by 3.2% since 2006, until 2017. (CAPMAS 2006, 2017)



Figure 2 Bad buildings conditions in ADAA, Source: Author



Figure 3 High rise buildings adjacent to historic two floors houses in the Citadel street, Source: Author

1.3. Hypothesis

As concluded from the previous section, ADAA district suffers from several issues where low life quality adds up to intended of unplanned bad buildings conditions. This eventually leads to evacuation of buildings for demolition, creating a demand for housing, which is currently full filled through informal settlements adjacent to ADAA or through building high-rise dense housing blocks in the heart of the historic district.

The study hence proposes affordable housing strategy as a tool to stabilize the society of the historic district. The construction of infill housing should contribute to the rehabilitation of the area through encouraging the existence of a socially homogenous community.

1.4. Methodology

As illustrated in (figure 4), the research is conducted through studying case studies offering rehabilitation approaches in similar situations, in order to learn about the