



Cairo University

COMPACT CITIES: AS A BASIC MODEL FOR SUSTAINABLE URBAN FORM

By

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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
2015

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Title of Thesis: **Compact Cities:** As A Basic Model For
Sustainable Urban Form

Key Words:

Urban sprawl; Compact city model; Intensification; Sustainable urban
development; Urban Growth; Urban heat island (UHI).

Summary:

The compact city model is a theory that may lead to a sustainable urban future. It is considered as one of the planning and urban design approaches towards more sustainable cities in the environmental, social and economic dimensions. Many claims and arguments are introduced in this theory since compact city model could affect the urban form positively and negatively. The compact urban form can be a successful approach to sustainability when the policies of compactness, regulations, strategies and urban governance are implemented in correlation to the other issues like social readiness for participation and responsibility, will National Estate, the capacity for implementation and development of economic resources. Sustainable compact model is needed, especially in developing countries to overcome the informality and the urban sprawl that deteriorate life today.





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عنوان الرسالة:

المدن المتضامة: نموذج للتشكيل العمرانى المستدام

الكلمات الدالة:

الزحف العمرانى، نموذج المدينة المتضامة، التنمية المستدامة.

ملخص الرسالة:

تختص الرسالة بدراسة " المدن المتضامة " كأحد استراتيجيات التخطيط والتصميم العمرانى، وكأداة لتشكيل عمران مستدام، من حيث البعد البيئى والاجتماعى والاقتصادى. ويهتم البحث ببعض القضايا وثيقة الصلة مثل تأثير النمو العمرانى على جودة الحياة، وأهمية الكثافات العالية في التشكيل العمرانى، خاصة في البلدان النامية، وتأثير الكثافة على النسيج العمرانى المتضام، خاصة ما له علاقة بوسائل النقل من تحديد لمسافات الانتقال، واستخدام وسائل النقل العام، وفهم وإدراك العوامل التي من الممكن أن تساعد في التوجه الصحيح للوصول إلى مدينة متضامة مستدامة.



المدن المتضامة : نموذج للتشكيل العمراني المستدام

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المهندسة / منة الله سعيد محمد توفيق

رسالة مقدمة إلى كلية الهندسة – جامعة القاهرة
كجزء من متطلبات الحصول على درجة ماجستير العلوم
في

الهندسة المعمارية

كلية الهندسة- جامعة القاهرة
الجيزة- جمهورية مصر العربية

2015

Acknowledgments

First and foremost, I would like to express my sincere gratitude to my supervisors, Professor Rowayda Reda Kamil, and Dr. Asmaa Abdel-Atti for their help, effort and support in various ways throughout my thesis with full patience. Their advice was really very effective in my work and adds a lot to the thesis content. I have learned immensely from their vast experiences.

I would like to thank Professor Helmut Bott, the dean of Urban Planning in Stuttgart University for his help and guidance in some parts of the thesis. His suggestions were really valuable. Thanks to Dr. Cornelia Redker for her careful feedback on some ideas.

I would like to thank my beloved husband Ahmed Samir for his kind words, love and encouragement, from the initial to the final level, support my decisions and help me to do all my thesis work, and without his help I wouldn't be able to have all of this.

Finally, I would like to thank my father, Dr. Saeed Tawfik and my mother Thany Kamil for their help, support and love, thanks to my brother Nader Tawfik and I am also very grateful to my sister Radwa Tawfik for her encouragement, help and effort throughout my work. Thanks to those who supported me in any respect during the thesis accomplishment.

Dedication

To my beloved Mama,

Thany kamel El-Shafie

Table of Contents

ACKNOWLEDGMENTS	I
DEDICATION	II
TABLE OF CONTENTS	III
LIST OF TABLES	VI
LIST OF FIGURES	VII
ABSTRACT	XI
CHAPTER 1: INTRODUCTION	1
1.1 Research Scope and Limitation	2
1.2 Problem Definition	2
1.3 Research question.....	2
1.4 Aims and Objectives	2
1.5 Research Methodology	3
1.6 Research Structure	5
PART 1: LITERATURE REVIEW	
CHAPTER 2: PROLOGUE TO COMPACT CITY	6
2.1 Introduction	6
2.2 Urbanization	8
2.2.1 Urbanization and Economic Concentration	8
2.2.2 Environmental Impact of Urbanization (Energy Use and Greenhouse Gas emissions)	8
2.3 Changing the Cities	11
2.3.1 Rise of Urban Sprawl	14
2.3.1.1 Measuring Sprawl (Aspects that Affect Urban Form)	15
- Land Use and Density	16
- Transportation: Connectivity and Automobile Dependency ...	16
2.4 Sustaining City in Face of Change	18
2.5 Compact City Concept	19
2.6 Conclusion.....	21
CHAPTER 3: COMPACT CITY AND SUSTAINABILITY	23
3.1. Introduction	23
3.2 What is the Sustainable Urban Form?	23
3.2.1 Centrists, Decentrists and Compromisers	23
3.3 How the Urban Form Contributes to Sustainability	27
3.3.1 Environment Expectations and Behavior of Compact City	27
3.3.1.1 Evolution of Transportation in Relation to Urban Form	27
3.3.1.2 Density and Travel Behavior	29
3.3.2 Social and Economic Issues	36
3.3.2.1 Social Aspect	36
▪ Can Compact City Help the Poor?	39
3.3.2.2 Economic Aspect	40

▪ Economies of Scale	41
▪ Green built and Increasing Land Prices	42
3.4 Density and Compactness	43
3.4.1 Relevance of Compact City in the Developing World	44
3.4.1.1 How to Achieve the Potential?	44
▪ Infill and Densification	44
▪ Concentrated Decentralization	44
▪ Transit Oriented Development	44
▪ High Rise, High Density Development.....	45
3.5 High Rise in Relation to High Density Understanding	45
3.5.1 Vertical Theory of Urban Design	47
3.5.2 Wandsworth Sky Zed	48
3.6 Design Strategies of High Density in Developing Countries.....	49
3.7 Urban Governance and Policies of Compact Cities	51
3.7.1 Transportation Policies.....	51
3.7.2 Land use Policies.....	53
3.8 The Effect of Compact City Policies on Sustainability Dimensions.....	56
3.9 An Assessment Method with Interrelation between Compact City Policies and Sustainability Dimensions.....	58
3.10 Conclusion.....	59

PART 2: CASE STUDIES ANALYSIS

CHAPTER 4: AN EVALUATION OF COMPACT CITY MODELS	61
4.1 Introduction	61
4.2 Case 1: Barcelona as a Compact City Model	62
4.2.1 City Transformation	63
4.2.1.1 High Density of Urban Form (The Eixample)	63
4.2.1.2 Open Spaces in Barcelona	66
4.2.1.3 Interrelation between Regional Compaction and Transportation in Barcelona	68
4.2.1.4 Mixed Use Development- Forum @22.....	69
4.2.1.5 Urban Renewal and Suburbanization Perspectives	71
4.2.2 Assessment of Barcelona Compactness	71
4.3 Case 2: Lujiazui	74
4.3.1 Density of the City	77
4.3.2 Open Spaces in Lujiazui	79
4.3.3 Transportation System	80
4.3.4 Mixed Use Development	83
4.3.5 Assessment of Lujiazui	84
4.4 Case 3: Curitiba- Urban Intensification -the Radial Concentric City	88
4.4.1 High density/Densification in Curitiba	90
4.4.2 Open Spaces in Curitiba	92
4.4.3 Transportation System	93
4.4.4 Mixed Use Development	98
4.4.5 Assessment of Curitiba	98
4.5 Case 4: Dhaka City – Bangladesh	102
4.5.1 High Density	103
4.5.1.1 Densification of Residential Areas in Dhaka	104
4.5.2 Open Spaces in Dhaka	105

4.5.3 Transportation System	106
4.5.4 Land Use Management in the City	109
4.5.4.1 Spatial Urban Pattern in Dhaka	109
4.5.5 Assessment of Dhaka City	113
4.6 Conclusion	116

PART 3: FUTURISTIC VISION

CHAPTER 5: COMPACTNESS IN DOWNTOWN CAIRO- VISIONARY

THINKING 117

5.1 Introduction	117
5.2 Evolution of Greater Cairo (GC) Urbanization	118
5.3 The Current Urban Structure of Greater Cairo	119
5.4 Downtown Selected Area and Feasibility Study	121
5.4.1 High Density in Downtown.....	123
5.4.2 Open Spaces in Downtown	123
5.4.3 Transportation in Downtown	126
5.4.4 Urban Fabric and Land Use Management in Downtown	128
5.5 Downtown Intervention Strategies	132
5.5.1 Transportation Network Development in Downtown Area- Macro Scale	135
5.5.2 Transportation Network Development in Downtown Area- Micro Scale	136
5.5.3 Visionary Image of Open Spaces with Biking Usage	138
5.6 Conclusion	141

PART 4

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS 142

6.1 Conclusion	142
6.2 Recommendations	144
6.3 Further research.....	145

REFERENCES 146

List of Tables

Table 3.1: Policy Tools for Local-Level Action on Climate Change	54
Table 3.2: Compact City Policy Goals and their Potentiality on Sustainability Dimensions.	56
Table 4.1: Density Comparison between the Eixample and Barcelona	64
Table 4.2: Population Distribution and Densities in 3 Zones Of Dhaka	104
Table 4.3: Amount of Land Use for Different Purposes in Dhaka	113

List of Figures

Figure 2.1: Share of Urban and Rural Population in 2010, 2050	7
Figure 2.2: People Living in Cities (Percentage of World Population /Year)	7
Figure 2.3: Trend in Urbanization by Continent. Urban Population and Growth (1950-2050)	8
Figure 2.4: Urban Density and Electricity Consumption	9
Figure 2.5: Urbanization, Density and Carbon Emissions	10
Figure 2.6: Illegal Land Divisions in Soe Paulo, Brazil. A Common, More Planned Form of Informal Settlement	12
Figure 2.7: Techno Pole Creation	13
Figure 2.8: Sprawl on a Regional Scale- a Subdivision near Columbus, Ohio, Encroachment on Farmland	14
Figure 2.9: Sprawl on a Neighborhood Scale	15
Figure 2.10: Schematic Comparison of Street Networks and Land Use in Sprawl (Upper Part Of Diagram) and Traditional Neighborhood (Lower Part Of Diagram) .	17
Figure 2.11: The Sustainable Development Challenge	18
Figure 2.12: An Image of a Compact City	20
Figure 3.1: Centrists, Decentrists and Compmisers	26
Figure 3.2: Evolution of the Spatial Structure of a City	27
Figure 3.3: Schematic Representation of Trip Patterns within Area	29
Figure 3.4: Compact Mixed-Use Nodes with Its Impact on Reducing Travel	30
Figure 3.5: Compact Nodes Linked by Mass-Transit Systems Can Be Arranged in Response to Local Constraints.....	30
Figure 3.6: Cars Run on an Overpass in Beijing - China, April 11, 2009	31
Figure 3.7: Comparison of Bicycles Cars and Buses	31
Figure 3.8: GHG Emissions by Sector, Eu27	32
Figure 3.9: Urban Heat Island Effect	32
Figure 3.10: Population Density versus Annual Gasoline Consumption per Capita .	33
Figure 3.11: Model Split and Urban Density, 1995(%)	34
Figure 3.12: Higher Density and Its Impact on Travel Behavior	35
Figure 3.13: Calthorpe's Model of Transit Oriented Development	37
Figure 3.14: A Cluster of Urban Village	38
Figure 3.15: Effect of Compact City on Social Sustainability	39
Figure 3.16: Bangkok residents take advantage of unused space and the canals for transport routes.....	40
Figure 3.17: Conceptual Sketch of Land Price Effect Due to Imposition of a Greenbelt	42
Figure 3.18: Urban Sartorial Interactions: Impact On the Sector's Climate Policies	45
Figure 3.19: Sketches of Eco Tower, Elephant and Castle, London.....	48
Figure 3.20: A Vertical Theory of Urban Design, Georgian London	48
Figure 3.21: A- 2Sky Zed Wandsworth, Aerial View. Two 35-Storey Aerodynamic Blades House Around 300 Shared-Ownership Flats. B- Cut-Away Perspective. Blades Connected Every Sixth Floor with Communal Enlarged Lift Lobbies Including Gardens.....	49

Figure 3.22: An illustration of Design Strategies of Increasing Density Especially in Developing Country (Relation between physical urban form and density).....	50
Figure 3.23: Urban Sartorial Interactions: Impact on the Sector's Climate Policies .	52
Figure 3.24: An Illustration of Assessment Method to Know How Compact Cities Could Contribute to Sustainability Either Positively or Negatively.....	59
Figure 4.1: Urbanization of Barcelona 1900, 1925, 1950, 1980	62
Figure 4.2: Cerda's Diagrammatic Program: Green Area Symbolizes the Larger Green Spaces	64
Figure 4.3: The change in the original plan by increasing density, building in the central courtyards, and not respecting the idea of having green public spaces.	65
Figure 4.4: Explaining the Pedestrian Measurement	66
Figure 4.5: Cesar Martinell's Block Recuperation	66
Figure 4.6: Three Periods of Urban Renewal in Barcelona. 1980-1986: Small Scale, Squares, Streets & Parks. 1986-1992: Bigger Scale, Sea Front, Residential and Sport Areas 1992-2006: Metropolitan Scale, Infrastructure & Strategic Areas	67
Figure 4.7: New Centrality Areas in Barcelona	68
Figure 4.8: Railway Network in Barcelona- 8 Lines- 2003	69
Figure 4.9: Scenario of Maximum Diversity Planned for the 22@ District	70
Figure 4.10: Barcelona Transformation with both Negative and Positive Sides.....	72
Figure 4.11: An Evaluation Path Diagram of Barcelona Case Studies According to the Compact Cities Main Policies and Dimensions of Sustainability	73
Figure 4.12: Three Of the Five Proposals for Lujiazui, Richard Rogers' Scheme, (B) Dominique Perrault's Scheme and (C) The Shanghai Urban Planning and Design Institute's Scheme	74
Figure 4.13: Shanghai Master Plan- Richard Rogers	75
Figure 4.14: SUPDI Scheme	76
Figure 4.15: SUPDI Scheme after Modification	76
Figure 4.16: Lujiazui City	77
Figure 4.17: Lujiazui Density Development	78
Figure 4.18: Mass Diagram of Lujiazui	78
Figure 4.19: Development of Urban Area in Lujiazui	78
Figure 4.20: Lujiazui Central Greenbelt	79
Figure 4.21: Lujiazui Flyover	80
Figure 4.22: Transportation Links to Other Urban Areas	81
Figure 4.23: Transport Links between the Sub Centers of Lujiazui	81
Figure 4.24: SUPDI Transportation Links System	82
Figure 4.25: Lujiazui Century Avenue	82
Figure 4.26: Roger's Land Use Distribution	83
Figure 4.27: Lujiazui Land Use Assessments with Limited Public Activities as Mono-functional Zone	84
Figure 4.28: Lujiazui Illustration Diagram of Positive and Negative Sides in Urban Development	85

Figure 4.29: An Evaluation Path Diagram of Lujiazui According to the Compact Cities Main Policies and Dimensions of Sustainability	86
Figure 4.30: Gregotti Scheme for the Expansion of Lujiazui in 2007	87
Figure 4.31: Some of the Programs Implemented for the Environment in Curitiba ..	89
Figure 4.32: Policy Integration in Curitiba	89
Figure 4.33: Population Density: Residents per Hectare	90
Figure 4.34: Curitiba- Density Zoning and Gradient in Built-Up Areas	91
Figure 4.35: Barigüi Park in Curitiba	92
Figure 4.36: Former Slums in Flood-Prone Areas in Curitiba	92
Figure 4.37: Urban Growth Axes in Curitiba	93
Figure 4.38: Development of the Curitiba Integrated Bus Network from 1974-59 to 2009.....	94
Figure 4.39: Curitiba Trinary Road System	95
Figure 4.40: Bus Lanes with Expansive Boulevards and Bus Stop in the Right	95
Figure 4.41: Green Line New Development in Relation to the Other Street Network System	96
Figure 4.42: Visionary Image of What the Green Line Will Look Like in the Future	97
Figure 4.43: Current Situation of the Green Line	97
Figure 4.44: Land Use Zoning in Curitiba	98
Figure 4.45: Framework of Sustainability in Curitiba as	99
Figure 4.46: An Evaluation Path Diagram of Curitiba According to the Compact Cities Main Policies and Dimensions of Sustainability	101
Figure 4.47: 1600-1980 Dhaka Urban Expansion	103
Figure 4.48: Spatial Disposition of Development Zones in DMPD	103
Figure 4.49: (A) Dhanmondi Residential Area with Adjoining Unplanned Area, 2002 (B) Uttara Model Town Showing Ongoing Densification, 2002 (C) Mohammadpur Locality on the Western Fringe with Adjacent Flood-Prone Area-Mid 1970	104
Figure 4.50: Residential Area Densification in Dhaka City	105
Figure 4.51: Large Scale and Well-Known Open Spaces in Dhaka City	106
Figure 4.52: Rickshaw - Dhaka City	107
Figure 4.53: Unplanned Transportation Network in Dhaka City	108
Figure 4.54: Dhaka Metropolitan Development Plan 1995	109
Figure 4.55: The Planned Residential Areas Location within Dhaka City Urban Grid	110
Figure 4.56: Dhanmondi Residential Areas	111
Figure 4.57: Dhanmondi Plot Division	112
Figure 4.58: Plot Transformation in Built Form (From Low-Density to High-Density Mixed-Use Development)	112
Figure 4.59: Dhaka City Densification Process	114
Figure 4.60: An Evaluation Path Diagram of Dhaka According to the Compact Cities Main Policies and Dimensions of Sustainability	115
Figure 5.1: The Evolution of Greater Cairo Population versus Egypt Population ..	118
Figure 5.2: Evolution of Population Density Categories in GC Administrative Zones.	

(A) Population Density Categories in Each of Population Years.	
(B) Evolution of Population Density Categories 1986, 1996 To 2022.....	119
Figure 5.3: Current Structure of Greater Cairo and the Development Corridors	120
Figure 5.4: Supreme Court Place, Downtown Cairo, Current and Proposed, the Khedival Cairo Competition2010- AC & AECOM	122
Figure 5.5: Opera Square, Downtown Cairo with the Multistory Garage Building, It Is Proposed to Create Underground Parking and Landscaped Piazza	122
Figure 5.6: Tharir Square Traffic Problem	123
Figure 5.7: Bab El-Louq square	124
Figure 5.8: Al-Gomhoreya Square	124
Figure 5.9: Talaat Harb and Mohamed Farid Square	125
Figure 5.10: Different Public Spaces in Downtown Area	125
Figure 5.11: Mapping Some of the Open Spaces in Downtown	126
Figure 5.12: Feasibility Study for Downtown Region-Micro Scale	127
Figure 5.13: Kodak Passageway	128
Figure 5.14: Street Vendors in Downtown Street	129
Figure 5.15: An Evaluation Path Diagram of Downtown Cairo According to the Compact Cities Main Policies and Dimensions of Sustainability	131
Figure 5.16: Development Strategies in Downtown Area	132
Figure 5.17: Negotiating Connectivity with NMS	133
Figure 5.18: B+R System	134
Figure 5.19: Reducing Car Dependency with other Modes of Transportation and Advantages for Utilizing Bikes	134
Figure 5.20: Metro Lines with Bikes Zones Integration in GC-Macro Scale	135
Figure 5.21: Integration of Transportation System in Downtown	136
Figure 5.22: Traffic Diagram with Interrelation between the Metro Stations and Biking Lanes	137
Figure 5.23: Restructuring Parking Areas and Creating More Public Spaces	138
Figure 5.24: Proposal of Regenerating the Open Spaces in Downtown	139
Figure 5.25: Lane of Bikes in El-Tahrir Street	139
Figure 5.26: Illustration of Intersection between the Car Lanes and New Interventions of Bike Lanes Design with Pedestrian Walks	140
Figure 5.27: Activating the public spaces in Tahrir square (The first one), and the Nile Cornish (the second one)	140
Figure 5.28: Cross Section of Both El-Tahrir Street (First One), and the Nile Cornish (Second One)	141
Figure 6.1: The Elements Which Should Be Integrated to Achieve Sustainability.	145

Abstract

The compact city could be an approach in urban planning development towards more sustainable cities, in the environmental, social and economic dimensions. Relationship between urban form and sustainability is now one of the most important debated issues according to the international environmental agenda. This thesis attempts to clarify the latest thinking conducted to high density benefits and costs of urban living. It presents different research approaches in this topic from a wide range of disciplines, and gives an insight into both the theoretical debate and the practical challenges surrounding the compact city. There is a widespread consensus that progress towards sustainable development is essential. From this debate, strong arguments are emerging to support *the compact city as one of the most sustainable urban forms*. However, many policies, management and recommended characteristics are needed in compactness to achieve sustainability otherwise the urban form will be affected negatively.

The research at the beginning introduces prologue to the “compact city” concept. Then the analysis of compact city theories from different perspectives, and how the compactness of land uses patterns could affect the sustainability positively and negatively. The compact city challenges are mainly associated with environmental quality, social and economic acceptability. The perceived benefits of this strategy include: saving agricultural land, reduced energy consumption and pollution, better public transport services, less car dependency and achieving livability while the challenges need to be tackled. Then, the research presents different examples with many aspects of compactness and interrelations between high densities with urban form, ending with a matrix that can show how “compact city” could be a successful model of sustainable urban development. Visionary thinking will be part of the research in the area of Downtown Cairo with proposing new interventions based on the outcome from the case studies analysis. Finally findings and recommendations will be suggested which could be considered in the futuristic research.

Key words: Urban sprawl- Compact city model- Intensification- Sustainable urban development- Urban Heat Island (UHI).