

AMERICAN UNIVERSITY OF BEIRUT

DESIGN STRATEGIES FOR RECONSTITUTING
DAMAGED URBAN HISTORIC CORES: THE CASE
STUDY OF ALEPPO

by
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A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Urban Design
to the Department of Architecture and Design
of the Faculty of Engineering and Architecture
at the American University of Beirut

Beirut, Lebanon
November 2014

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ACKNOWLEDGMENTS

This paper is a work that shows a humble gratitude to the city that pushed me to realize my dreams and inspired me to write my thesis, Aleppo.

I would like to thank my advisor Omar Abdulaziz Hallaj for his guidance, insightful comments and the great amount of knowledge about the old city of Aleppo.

I would like to thank my committee members who helped me successfully accomplish this research, Professor Mona Harb, Professor Maria Gabriella Trovato and Professor Sylvia Short.

I sincerely thank Professor Robert Saliba for the profound discussions we had in class throughout my academic year. Your critical comments and passionate discourses have opened new horizons for me to understand the concepts and theories of urban design.

I would like to thank Professor Mona Fawaz for her instructions and advice throughout my academic years. I would like also to thank all the faculty members and staff at the department of architecture and design for their support.

I thank Mr. Youssef Haidar for the inspiring discussion on the post-war reconstruction and reconstituting projects.

I want to express my deepest gratitude to my friends and flat-mates for providing a loving and supporting environment for me.

I thank my sisters Joelle and Nathalie for their continuous encouragement and support. I thank my parents Wadi and Siba for their limitless support for everything that has been accomplished in my life. To them I dedicate this thesis.

AN ABSTRACT OF THE THESIS OF

Myriam Wadi Zaloum for Master of Urban Design
Major: Urban Design

Title: Design Strategies for Reconstituting Damaged Urban Historic Cores: The Case Study of Aleppo

Modern planning interventions widened the streets of the old city of Aleppo in order to facilitate car movement, causing the destruction of many monumental buildings until the enactment of the World Heritage listing put a limit to further interventions. The boulevard of Qadi Askar exemplifies such planning acts. There, the neighborhood was fragmented in two parts, historical facades were brought down, residual spaces were left undefined, artificial facades were created, and street walls were left disconnected. The ongoing Syrian war adds a new layer to the damage. This thesis proposes a strategic approach to urban design that tackles breaks caused by modern planning and by wars.

Building on the Integral Urbanism framework, helped bring different nuances of reading the city through the successive periods from before the construction of the boulevard, after its construction, and the current war. The design intervention applies its five core characteristics (hybridity, connectivity, porosity, authenticity, and vulnerability) in three character zones that have different physical and cultural values.

The study seeks to shift from a fixed final outcome, and offers strategic interventions inspired from social and historical contexts. The study aims to transform the boulevard into a dynamic urban space that ameliorates social relationships by enhancing built form and urban spaces, seeking to induce other urban planning interventions in the city in the process of future post-war recovery.

CONTENTS

ACKNOWLEDGEMENTS	v
ABSTRACT	vi
LIST OF ILLUSTRATIONS	x
1. INTRODUCTION	1
1.1. General background	1
1.2. Recent damage as a result of the armed conflict in Aleppo.....	3
1.3. Research problem and objectives.....	3
1.3.1. Problem definition	3
1.3.2. Research question	6
1.3.3. Research significance.....	7
1.3.4. Research objectives.....	8
1.4. Methodology	9
1.4.1 Introduction	9
1.4.2 Objectives of data collection	10
1.4.3 Data Gathering	10
1.4.4 Data Analysis	11
1.4.5 Limitation of data collection	12
2. CASE STUDIES ANALYSIS	13
2.1. Introduction.....	13
2.2. Nicosia	14
2.2.1. Introduction.....	14
2.2.2. The 1984 urban development plan.....	15
2.2.3. Lessons learned	17
2.3. Mostar: Bosnia-Herzegovina	18
2.3.1. Introduction.....	18
2.3.2. The urban peace-building development of post-war Mostar	19
2.3.3. Lessons learned.....	21
2.4. Beirut.....	22
2.4.1. Introduction.....	22

2.4.2. Physical changes and the master plan after the war.....	23
2.4.3. Lessons learned.....	25
2.5. Conclusion	26
3. HISTORICAL OVERVIEW	28
3.1. Introduction.....	28
3.1.1 The location and context of Aleppo.....	28
3.1.2 The urban expansion of the old city in the Ottoman period	29
3.2. The structure of the Old City: Distribution of residential and commercial parts	30
3.2.1. The “intra muros” city	30
3.2.2. The “extra muros” city.....	32
3.2.3. The city gates	32
3.2.4. The pedestrian network in the city.....	33
3.3. The historic evolution	35
3.3.1. The expansion towards the east (outside the city walls).....	35
3.3.1.1. The expansion towards the east in the Ayyubid period ...	35
3.3.1.2. The expansion towards the east in the Mamluk period....	37
3.3.1.3. The expansion towards the east in the Ottoman period ...	38
3.3.2. The expansion towards the west (outside the city walls).....	40
3.3.3. The early planning applications	42
3.3.4. The pre-independence plans	42
3.3.5. The 1954 master plan.....	42
3.3.6. The 1970 master plan.....	44
3.3.7. The initiation of the conservation	46
3.4. The historical importance of Bab Al Hadid area	46
3.5. Conclusion	47
4. CASE STUDY PROFILE	49
4.1. The case study (Quadi Askar Boulevard) plan	49
4.2. The social structure of the city.....	50
4.2.1. Socio-spatial characteristics.....	50
4.2.2. Socio-economic characteristics.....	51
4.2.3. The neighborhood structure	52
4.3. Physical and functional characteristics	55

4.3.1. Building typology	55
4.3.2. Land use	57
4.3.3. Street hierarchy	60
4.3.4. Open spaces	61
5. LITERATURE REVIEW	63
5.1. General introduction	63
5.2. Introduction to integral urbanism.....	64
5.3. Explaining the elements of integral urbanism	65
5.3.1. Hybridity	65
5.3.2. Connectivity	66
5.3.3. Porosity	67
5.3.4. Authenticity.....	68
5.3.5. Vulnerability	69
5.4. The study area in the period before the construction of the boulevard....	70
5.4.1. Hybridity	70
5.4.2. Connectivity	74
5.4.3. Porosity	76
5.4.4. Authenticity.....	78
5.4.5. Vulnerability	80
5.5. The study area in the period after the construction of the boulevard.....	81
5.5.1. Hybridity	81
5.5.2. Connectivity	84
5.5.3. Porosity	92
5.5.4. Authenticity.....	93
5.5.5. Vulnerability	94
5.6. The study area during the war.....	96
5.7. Conclusion	98
6. URBAN DESIGN STRATEGY AND INTERVENTION	99
6.1. Introduction.....	99
6.2. Design strategy.....	100
6.3. Urban design recommendations.....	105
6.4. Analysis of the studied area	106
6.5. The implementation of the strategy	108
6.5.1. Spatial/functional zoning strategy.....	108
6.5.2. Streetscape strategy.....	109

6.6. Action areas of intervention.....	110
6.6.1. Action area I (open public space approach)	111
6.6.2. Action area II (adaptive reuse approach)	118
6.6.3. Action area III (preservation approach)	125
6.7. Proposed implementation framework	130
7. CONCLUSION.....	131
7.1. Research findings.....	131
7.2. Limitation of the study.....	132
7.3. Future research.....	133
BIBLIOGRAPHY	134

ILLUSTRATIONS

Figure	Page
1. The old city before the construction of the boulevard	2
2. The different implemented streets in the old city 1950-1978	2
3. The proposed plan 1978 by the municipality after the execution of the boulevard..	5
4. Left over spaces	6
5. Open private spaces open to the street and treated with fences	6
6. Open private spaces open to the street	6
7. The interface zone of the boulevard.....	6
8. The interface zones of the boulevard on the east and the west sides	9
9. Nicosia master plan	16
10. The location of the proposed neutral zone along the boulevard	19
11. Image showing the destruction of the Stari Most Bridge during the Croat-Bosniak war.....	20
12. Image showing the renovation of the Stari Most Bridge after the war	20
13. The master plan of Solidere	24
14. Aleppo as the main axis of Silk Road and the trade routes from Europe to China	28
15. The expansion of the city outside the city walls in the areas of Banqusa and Jdeydeh in the 18th century	29
16. The medina that was built on the Hellenistic grid	30
17. The traditional structure of Aleppo.....	31
18. Image showing the souks of the medina where people interact and communicate	31
19. The structure of the old city in the 19 th century that consists of the medina, the citadel, the intra muros, the extra muros, and the gates	33
20. Image showing the narrow street in the residential areas	34
21. The plan of Aleppo city during the 11 th century before the Ayyubid period.....	36

22. The plan of Aleppo city at the end of the 13 th century during the Ayyubid period.....	36
23. The plan of Aleppo city at the beginning of the 16 th century during the Mamluk period	38
24. The plan of Aleppo city at the middle of the 19 th century during the late Ottoman period.....	39
25. The expansion of the city to the east in Azizieh and Jamilieh that takes the form of the western grid	41
26. The master plan scheme and the main road pattern proposed by Gutton in 1954.....	44
27. The master plan that was proposed by Banshoya in 1970 for the Old City and the cul-de-sac proposal as a means to serve the commercial center.....	45
28. The chronological construction sequence of the streets	49
29. The subdivision of the neighborhoods in the 18 th century.....	53
30. The numbers of the quarters and their names that follow the professions of the occupiers in the 18 th century: 23-Al Dallalin; 26- Al farra'in; 79: tatarlar0	54
31. The introverted courtyard and the distribution of the house's elements.....	55
32. Image showing the shared walls of the traditional houses.....	56
33. Image showing the Mamo house in Qadi Askar area as the ornaments reflect the social and the income level of the dwellers of this house	57
34. The transformation of properties in the area of Bab Al Hadid from private to Waqf and vice versa	58
35. The commercial activities on the main axes while the narrow streets are restricted to residential uses.....	59
36. Land use study by the GTZ.....	60
37. Image showing the semi-private space of the narrow streets that lead to the house.....	61
38. The distribution of activities on the peripheries of Bab Al Hadid.....	72
39. The types of open spaces on the peripheries of Bab Al Hadid	73
40. The trade relation between the inside of the walled city and the outside on the peripheries of Bab Al Hadid.....	74

41. The distribution of the streets outside the walled city on the peripheries of Bab Al Hadid depending on the level of privacy	75
42. The distribution of the public amenities adjacent to the main streets allowing the indirect relation to the residential clusters	75
43. The gates' relation to the city as porous points that monitor the movements of the caravansaries	76
44. The porous relationship on the neighborhood level between the commercial shops and the residential clusters	77
45. The porous relationship on the neighborhood level between the residential clusters.....	77
46. The urban expansion of the city through the interaction between the dwellers and the traders which allowed the city's authentic growth	78
47. Image showing the souks in the medina that shows the relation between people and places.....	79
48. The connection of the walled city to the peripheries that contributed to the authenticity of the city	79
49. The proposed land use plan in 1978 after the construction of the boulevard	82
50. The land use along the boulevard and the Khandak Street	83
51. The analysis of the land use along the boulevard and the Khandak Street.....	84
52. The boulevard as an anomalous urban element in its context	85
53. The boulevard cutting the previous street network.....	85
54. The position of the boulevard in the Old City	86
55. The bisected edges of the boulevard.....	87
56. The effects of the boulevard on the bisected blocks	87
57. The resulted types of buildings after the boulevard's construction	88
58. The different treatments of the resulted left over spaces on the edges of the boulevard.....	89
59. An example of facade that is cut and open to the street.....	89
60. An example of a refurbished facade treated with a fence and awaiting the new development	89

61. Image showing the incremental work on the edges of the boulevard as retail shops.....	90
62. Image showing the character of the street.....	90
63. The stairs linking the boulevard to the other side of the neighborhood.....	91
64. The change of porosity that is demonstrated on the edges of the boulevard	92
65. The edges' new urban condition that does not reflect the authenticity of the neighborhoods that stand behind	94
66. The additional destruction of the old buildings to build the new ones	95
67. The high-rises that are overlooking the old neighborhood behind	95
68. Image showing the destruction of the buildings in Qadi Askar boulevard area because of the war	97
69. Image showing the destruction of the façade in Qadi Askar boulevard area.....	97
70. The strategic plan using the elements of integral urbanism.....	102
71. The composition of the solid and voids and the typology of buildings resulted from the construction of the boulevard where it cut the urban fabric ..	103
72. The application of integral urbanism characteristics on buildings and open spaces.....	103
73. The resulted buildings' condition on the edges of the boulevard	104
74. The treatments of the facades that preceded the boulevard construction	104
75. The proposed development using the elements of integral urbanism.....	104
76. Party wall map of the neighborhood	106
77. The size and the orientation of the parcels.....	106
78. The distribution of the functions before the construction of the boulevard.....	107
79. The impact of the boulevard on its edges and the adjacent districts.....	107
80. Zoning strategy map	109
81. The location of the action areas on the three zones	110
82. The existing conditions resulted from the construction of the boulevard in action area I	112
83. The strategy concerning the buildings in action area I	112

84. The streetscape strategy in action area I	112
85. The streetscape and the buildings strategies in action area I	112
86. The area before the construction of the boulevard.....	114
87. The area after the construction of the boulevard	114
88. Aerial view map of the site where the shops are located.....	114
89. Image showing the retail shops on the edge of the boulevard	114
90. A diagram showing the strategy of the action area I	114
91. Action area plan I.....	115
92. A section in action area I	116
93. A sketch of the proposed action area I.....	117
94. The existing conditions resulted from the construction of the boulevard in action area II.....	119
95. The strategy concerning the buildings in action area II.....	119
96. The streetscape strategy in action area II.....	119
97. The streetscape and the buildings strategies in action area II.....	119
98. The area before the construction of the boulevard.....	121
99. The area after the construction of the boulevard	121
100. Aerial view map of the site where the bisected façade is located.....	122
101. Image showing the bisected façade on the edge of the boulevard.....	122
102. A diagram showing the strategy of the action area II	122
103. Action area II	123
104. A section in action area II	124
105. A sketch of the proposed action area II	124
106. The existing conditions resulted from the construction of the boulevard in action area III	125
107. The strategy concerning the buildings in action area III.....	125
108. The streetscape strategy in action area III.....	126
109. The streetscape and the buildings strategies in action area III.....	126

110. Aerial view map of the mosque	127
111. The area before the construction of the boulevard.....	127
112. The area after the construction of the boulevard	127
113. A diagram showing the strategy of the action area III.....	128
114. Action area plan III	128
115. Image showing an inside view of the destroyed ceiling of the mosque.....	129
116. Image showing the destruction of the internal façade	129
117. Image showing the destruction of the internal facade	129
118. Image showing the internal destruction of the courtyard and the arches.....	129

Table	Page
1. The key points of the integral urbanism concept and their gradual degradation in the periods before and after the construction of the boulevard, and during the war.....	70

CHAPTER 1

INTRODUCTION

1.1. General background

The Old City of Aleppo was subjected to a process of modernization that forcefully began to transform the city since the mid twentieth century. Successive planning ordinances and urban projects caused transformation in the urban fabric and affected the expansion of the city. Earlier master plans (1900, 1932-34 and 1938) had made little impact on the Old City as they were only partially implemented; only some widening of streets took place in certain locations. By contrast, the partial implementation of the 1954 Master Plan of Gutton and the 1969-1974 Master Plan of Banshoya led to the destruction of more than 20% of the traditional urban fabric (Khechen, 2000: 37). Wide vehicular roads were introduced and caused the destruction of large parts in the Old City (Figure 1, 2). These actions continued until the government's decision to classify the Old City as a historic area (1982 for the intramural city and 1986 for the remaining extramural parts). The ordinance was reinforced when the Old City was added to the World Heritage List in 1986. In accordance with Syria's Antiquities Law, the construction and demolition were prohibited without the approval of the Directorate of Antiquities. This put limits on any further urban transformation in the Old City (Khechen, 2000: 37 - 40). The inadequate resources available for protecting the newly designated historic zones limited the intervention of the municipality and the antiquities authorities, and large swathes of the Old City particularly in the northern and eastern extramural areas were totally neglected and yet deprived of development rights to allow their residents to take care of them. The historical overview sheds light on the modernization process in

the Old City that was manifested in the revitalization in some sections, but not in others such as the east side. This fact caused the creation of strong socio-economic divisions between the east part and the west part in the Old City which is representative of the greater division of the city as a whole: the more affluent neighborhoods expanded westward while poverty belts grew haphazardly to the east and south.



Figure 1. Map showing the old city before the construction of the boulevard

Source: Autocad map taken from the municipality 2011

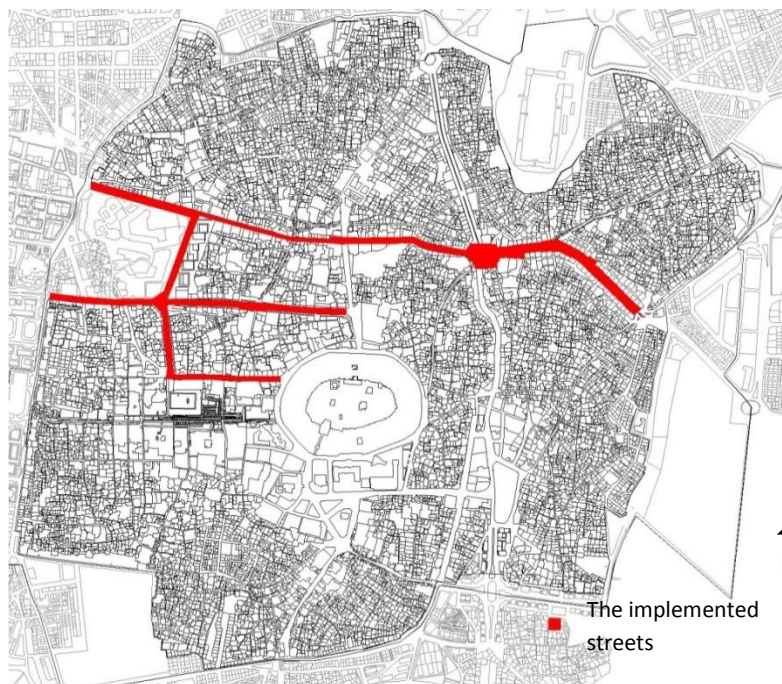


Figure 2. Map showing the different implemented streets in the old city 1950-1978

Source: (Author, 2014)

1.2. Recent damage as a result of the armed conflict in Aleppo

The rupture to the urban tissue due to the planning process of past decades has been amplified today by the violence currently taking place in the city as part of the ongoing civil war in the country. The extent of damage caused by the ongoing war is still not fully documented or explored. Preliminary documentation available from news sources points to patterns of destruction on major street frontages that don't go deep into the fabric. In that sense, the pattern of war caused damage has created conditions not unlike the ruptures of residual spaces created earlier through planning interventions. Therefore, urban design strategies needed to solve the problems caused by the imposed boulevard must also consider the potential impacts and effects of the war on the urban fabric. Therefore, the design interventions that will be suggested in this thesis for revitalizing and restoring the urban fabric damaged by planning can also be useful as a planning and design tools for reconstruction after the war. Information about urban conditions, support structures and plausible strategies might allow urban designers to predict and prepare for the consequences of the problem.

1.3. Research problem and objectives

1.3.1. Problem definition

Aggressive changes to the plan of Aleppo's Old City started in earnest in the mid-twentieth century. The east part of the Old City of Aleppo suffered a rupture in the urban fabric through a series of modern planning interventions, most apparently in the area where a through-traffic artery was imposed on the top of the inner city in the 1970s. The particular problematic context addressed in this proposal is the boulevard of Qadi Askar, a through-traffic artery that cut through the continuous urban fabric of the Old City to the north east.

Until now, conventional urban design has dealt with the shaping and improvement of the quality of the boulevard and its surroundings by proposing new buildings on both sides as a problem-solving for the rupture in the urban fabric. From this perspective, boulevards are conceptualized as physical impositions that create formal and functional segregation within a continuous urban fabric. The previous proposed planning studies in 1978 were to create modern buildings that would envelop the old urban fabric behind; which would have caused additional harm to the existing urban fabric (Figure 3). This model – never implemented - consisted of five stories buildings with a ground floor defined by a continuous gallery and containing commercial spaces. The upper floors were envisioned for residential use to compensate the owners of the demolished houses for losing their property and tenancy rights, while the municipality would make additional income by renting out the commercial spaces on the ground floor.

The consequences of building the boulevard posed problems in terms of connectivity between the two adjacent areas: the function of the street in its modern context, the continuity of land use, the undefined frontages, and most importantly, the increasing socio-economic disparity between the eastern and the western parts of the city. The initial goal of constructing the boulevard as an east-west connector created a de-facto bridge that crossed over the urban tissue of the Old City. It did not engage the areas along its sides as a part of a development plan when it was implemented; instead the residents of the area were pushed away without benefiting from this implementation.



Figure 3. Map showing the proposed plan 1978 by the municipality after the execution of the boulevard

Source: (Author, 2014) (Based on draft proposal by Aleppo municipality for the area in 1978)

Therefore, this thesis addresses three current conditions due to the infrastructural break: left over spaces, building typologies, and the character of the boulevard in its context. These conditions can be defined as spatial, legislative, and functional conditions created along the edges of the boulevard and within its adjoining districts.

Within the Old City fabric, each of these conditions can be defined as:

- 1) Left over spaces conditions: The impact on the adjoining parcels and blocks fronting the boulevard causing many left over spaces (Figure 4).
- 2) Building conditions: The impact on the urban fabric that is bisected by the boulevard, causing new socio economic division and new building typologies and block morphologies within the neighborhoods (Figure 5, 6).
- 3) The resulting interface: The functional and physical conditions created by the boulevard's construction produced new frontages that lack a clear urban and architectural identity which weakens its link to the adjacent districts (Figure 7)



Figure 4. Left over spaces
Source: (Author, 2014)



Figure 5. Open private spaces
 open to the street and treated with
 fences
Source: (Author, 2014)



Figure 6. Open private spaces
 open to the street
Source: (Author, 2014)

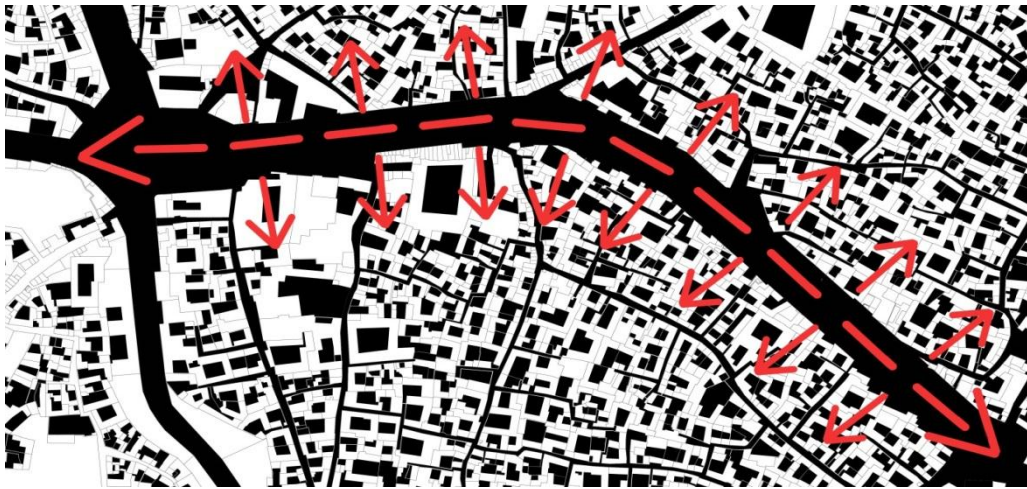


Figure 7. Map showing the interface zone of the boulevard
Source: (Author, 2014)

1.3.2. Research question

This thesis investigates the emerging conditions and typologies of segregation/integration within the inner-city fabric. It will attempt to shift attention to the importance and opportunities that lie in the brutally damaged urban fabric. But instead of offering substitutes; it attempts to devise a means to reassess and deal with the built environment and the landscape as it exists. The main question in this thesis is: How can we (urban designers) re-connect the divided parts of the city across the linearity of an urban boulevard and the transversal detachment along its side with an urban design strategy that can serve as a catalyst for revitalization and reconstruction of the Old City? Accordingly the issues to be investigated in this thesis are articulated around three main complementary points:

- Catalytic and strategic actions: How can an urban designer instigate specific interventions to regenerate the decaying and abandoned historic buildings and their exposed courtyards that have been cut by the boulevard?
- Model strategy: How might this strategy then serve as a model for a post-war recovery?
- Physical connectivity: How can an urban designer initiate processes that bridge between the two divided east-west parts in the city and the interface area along the boulevard?

1.3.3. Research significance

The significance of the thesis lies in regenerating the urban fabric surrounding a major existing boulevard that has cut through old urban fabric. This boulevard creates a site that has specific conditions not only for the Old City but for the city of Aleppo at large. It acts as an imposed structure that does not engage the residents of the area, but rather it works as a through traffic artery linking the east to the west of the city. The implications and processes that the boulevard imposes on the spatial, functional, and legislative characteristics have not been addressed yet for this area, since the construction of the boulevard was not followed by any type of development on either side. The thesis will not define a fixed output in its products and approaches, but aims to define a process through which Aleppo's Old City can be re-generated and revitalized. The research introduces the theory of 'Integral Urbanism' which stresses the need to create connections that re-integrate abandoned and fragmented spaces into the urban fabric. It also emphasizes urban design as a generator of catalytic processes, as opposed to master plans and design schemes fixed in time and space. Gradually, this inclusive perspective will diminish the previous negative reinforcement of

boundaries between the Old City and the rest of the city. Hence, it opens-up new enquiries about the possibilities of the Old City center's growth and development- the link between the separated adjacent parts of the boulevard, and the connection to rest of the city. This method can be used as a strategy as a part of anticipated planning for post-war reconstruction in the war torn city.

1.3.4. Research objectives

The proposed urban design response to this problematic context revolves around the functional, social and physical breaks of the old core and its periphery, and focuses on the issue of identity and civic space. The study encompasses the interface zone between the boulevard on the east side of the Old City as a link between the peripheral areas on the east and the west of the city since it is essential to study the effects of the boulevard on the surrounding periphery (Figure 8). Due to the complexity of the site, an experimental design approach is needed to merge the segregated parts on both sides of the street and to reassure on the continuity of the street as a part of the main axis in the Old City linking its east side to the west side. Therefore this study aims:

- To enhance local urban character, local culture and the identity of the area in a way that ameliorates the living conditions of its current residents through a proposed urban design strategy.
- To enhance the linkage along the boundaries and in the residual spaces created by the boulevard and the visual continuity of the boulevard as a section of the main axis linking the east side of the city to the west in order to improve the legibility of the area that will function as a cohesive system.

- To propose an urban design intervention that is responsive and dynamic to the embodied character of the Old City by proposing to regulate new development and allow for a progressive and sustainable process of revitalizing the neighborhood.



Figure 8. Map showing the interface zones of the boulevard on the east and the west sides

Source: “Aleppo.” Map. *Google Maps*. Google. Web. 2013.

1.4. Methodology

1.4.1. Introduction

Data collection is a key activity to implement my strategy for the adjacent areas of the boulevard Quadi Askar: As Kothari has noted: "Researchers not only need to know certain indices . . . but they also need to know which of these methods and techniques are relevant, and which are not" (Kothari, 2009: 8).

From the outset the approach to be undertaken by this thesis has been seriously hampered by the fact that the area under study is not accessible due to the on-going war in the country and specifically in the Old City of Aleppo. Conditions on the

ground are changing very rapidly. Primary documentation will thus be impossible. However, as the methodology of the research is to develop frameworks for reconstruction and not concrete detailed designs, the available data on the site prior to the war will be more than sufficient to undertake the research.

1.4.2. Objectives of the data collection

My main objective has been to identify indicators to monitor the urban transformation in the area where the boulevard passes, in order to generate recommendations and design strategy proposals that fit within the urban context.

The main axis linking the east side to the west side passes through areas that were subjected to urban transformation because of historic consequences. To understand the urban conditions as they presently exist, it is useful to study the sites diachronically across four periods; the Ottoman Rule, the French Mandate, the Post-Independence Period, and the present day.

1.4.3. Data gathering

- Library research: I will use references from the library in order to build a theoretical background about the concepts that fit within the problems of the site, the context of the site as a historic zone, and the tools used to deal with the specific existing elements in the site. Therefore, I will collect data that tackle my problem on the regional level.
- Maps : My research depends on mapping by using two sources:
 - Historical resources: They will be collected from the internet and other sources in order to do an extensive historical review study.

- Present resources:
 - Landscape Systems: They include topographic and infrastructural elements.
 - Morphological Systems: They record fragmentary evidences in the urban fabric. In addition, they study regular and irregular block typologies in the organic urban context of the Old City, and configurations of buildings and open spaces.
 - Legislative Systems: They describe administrative systems, and zoning laws.
 - Land-Use Systems: They examine how people use a space in a way that may or may not coincide with zoning laws.
- Comparative case studies: I will use case studies of cities that witnessed war and present the methods used for a post war reconstruction. The case studies will focus on the context, the physical changes of the city during war, and the implementation of the proposed strategies.

1.4.4. Data analysis

I will analyze my data (books, maps, and case studies) in order to extract the concepts that are projected by the authors and the tools used in the case study when dealing with similar contexts.

Different maps will be used to analyze the urban fabric and they constitute of:

- Landscape systems: This analysis tackles the different types of arteries in the Old City that range between modern constructed streets and old narrow alleys.
- Morphological systems: The morphology study enables me to understand the typology of the blocks in the Old City in order to be able to propose solutions that fit within the urban fabric.
- Legislative systems: Learning the zoning laws of the Old City provides me with a critical understanding of the building heights law of the different parts of my study area.
- Land use systems: Using the already existing land use maps in the Old City of Aleppo will enable me to absorb the existing and to propose new land uses on the ground level and the floor level.

1.4.5. Limitations of data collection

Due to the current war condition in the area, it is hard for me to have access to the site. Therefore, collecting definitive information about the state of damage will not be possible. Yet, preparing for a future recommendation is of great profit for a post war reconstruction. Moreover, as the thesis is not only concerned with physical implementation, but also seeks to develop a participatory and incremental strategy for post war reconstruction, this limitation is of minor consequence. Future negotiations with the people of Aleppo are part of building the future Aleppo and to come up with a collective vision for this building process. I will propose a strategy that will focus on a design process through which people will be engaged.

CHAPTER 2

CASE STUDIES ANALYSIS

2.1. Introduction

The three cities of Nicosia, Mostar, and Beirut suffered a harsh war and fighting took place in the center of the cities causing losses on the urban level: the destruction of many historic buildings, and on the social level: the division of communities. I take the example of those cities to explain what happens to urban fabric during and after war particularly with reference to how infrastructural breaks posed important conditionalities on the reconstruction process. When dealing with the situation after war, some proposals were presented and meant to reunite the hostile groups for urban development plans. However, some problems were faced when dealing with remedying the impact of the conflict, and therefore, some cases succeeded in accomplishing a physical implementation, while other cases failed, and also some cases succeeded in engaging people to think for future reunification, while other cases failed in reuniting people.

Learning about these cases will help to understand the approach that was taken in realizing the projects in the post-war period. Each case includes a discussion of the lessons learned that can be applied for the case of Aleppo.

2.2. Nicosia, Cyprus

2.2.1 Introduction

In Cyprus between 1958 and 1964, communal violence between Greek Cypriots and Turkish Cypriots required the creation of ethnic enclaves as a way to alleviate the violence. In 1974, the Turkish invasion of Cyprus in the north part of the island caused the displacement of 17500 Greek Cypriots from the north to the south and about 40000 Turkish Cypriots from the south to the north. During this time the United Nations established a buffer zone that was built upon previous ethnic demarcation lines formed in the early 1960s. In 1983, an official declaration defined Southern Nicosia as the capital of the Greek Cypriot population and Northern Nicosia is the capital of the north Turkish Cyprus.

The case Of Nicosia has similarities to Aleppo in its effects and the perception of people towards ethnic divisions. The Turkish and the Greek Cypriots communities each consider themselves as ethnic minorities; similarly in the case of Aleppo the two opposing groups consider themselves as threatened minorities. The division between the north Turkish Cyprus and the south Greek Cyprus is similar to the division between the east and the west sides of Aleppo that is shaped by having two sides alienated with a specific political agenda, but in this instance with the absence of a green line. The boundaries between the two parts are blurred and even dynamic as they respond to the changes of the results of the winning group. Urban development was adopted as a remedy to heal the conflict in Nicosia's two sides and took place in the Old City on both sides of the green line and incorporated a rehabilitation plan for the Old City as a means for reunification. Similarly, my case study in the Old City of Aleppo attempts to focus on a part of the Old City that has been subjected to harsh

destruction. My proposal seeks a rehabilitation strategy that aims at engaging the locals in reunification plans.

2.2.2. The 1984 urban development plan

The development plan ignored the physical separation and proposed a master plan approach in the historic city center that had been proposed by the United Nations Development Program in 1984. It aimed at disregarding the green line and moving towards a "hypothetical unified entity" (Bollens, 2012: 73). The European Union-funded development meant to enhance the pedestrian areas in the commercial and the historic center on each side of the line in a way that would allow for a future connection when the physical partition would be detached. This project would be followed by rehabilitation of the buildings in the historic center by planners who sought a functional integration in the city. Many meetings which were proposed by the contested groups of the both sides were held between planners and architects in the buffer zone area. In addition, a hundred other Nicosia Master Plans (NMP) were proposed by locals and international institutions. The UN project aimed at creating a "centripetal momentum" in a divided city that used the city center as a place for a center zone strategy (Bollens, 2012: 75) (Figure 9).

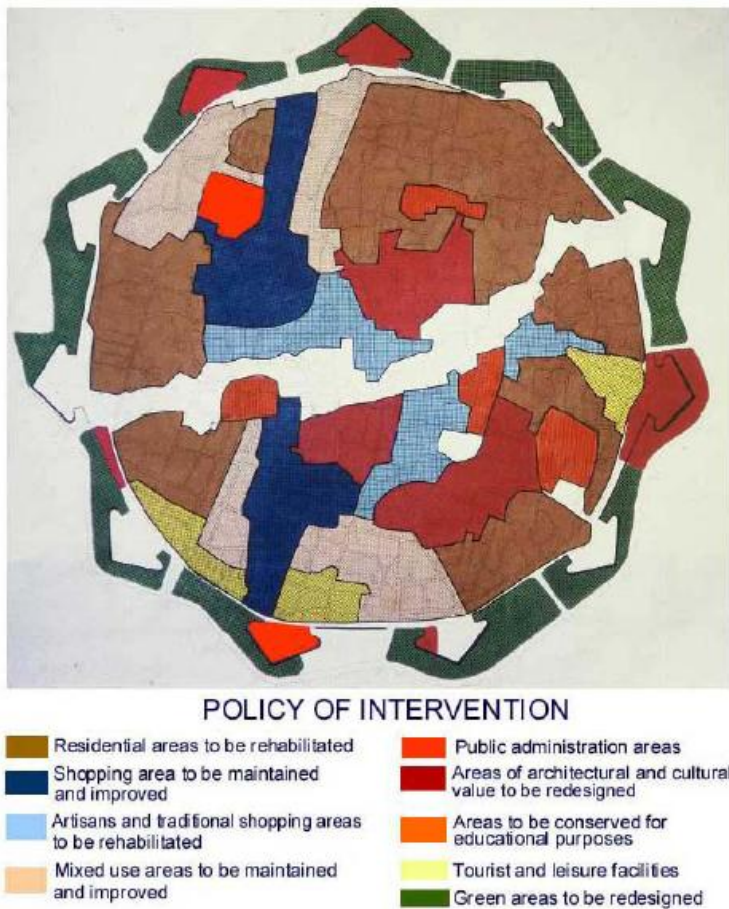


Figure 9. Nicosia master plan

Source: Retrieved from <http://www.thepep.org/en/workplan/urban/documents/petridouNycosiamasterplan.pdf>

What allowed for these plans that aimed at the reunification of the city was the unofficial relationship between the mayors of each side. They allowed for the maintenance of a joint city-wide sewer system in 1978. This type of connection was the first step to a reunification plan between the two separated parts as it was meant to upgrade the infrastructure of both sides of the city. Elevating this underground link to incorporate the ground level was followed by a master plan to engage the historic city center in the project (Figure 12).

2.2.3. Lessons learned

Some social, economic, and political conditions contributed to the perforation of the wall. Socially, the locals of the two sides succeeded in making physical changes in the wall as they wanted this reunification regardless of acquiring any official permits. In addition, the unofficial relationship between the two mayors contributed in producing a development plan under the auspices of the United Nations Development Program. Economically, the project of the master plan was funded by the European Union in the commercial and the historic center. However, politically the project did not succeed, since it failed to get the agreement of both sides for the reunification.

Concerning the Aleppo case study some lessons can be learned in terms of the engagement of Nicosia's residents in the physical alteration of the green line. First, the unofficial relation between the two mayors facilitated the proposal of The United Nations of the development plan which in turn facilitated the participation of the locals in the decision making. Second, urban planners and architects of the both sides formed a "bicomunal mechanism" through the years as a means to discuss proposals for the historic city center. Third, in planning for future interventions in Aleppo: the awarded prize to the groups should be conditional and beneficial for both groups. The failure of the reunification of Nicosia would have been different if the prize would be other than giving the EU membership because the Greeks already had it. Fourth, this case study shows the strong impact of the public participation in the decision making: people's access to information, information exchange and participation, consultation and discussion among professionals and nonprofessionals, and direct negotiations between both communities.

2.3. Mostar, Bosnia-Herzegovina

2.3.1 Introduction

From April 1992 to February 1994 Mostar witnessed two wars. The hostilities radically changed the demography of the city through forced displacement that pushed the Muslims to move from the west to the east of the city. Concerning the physical losses, the greatest destructions happened in east and west Muslim Mostar. On the urban level, the confrontation line was down the Neretva River dividing the city into two camps: the first Croat and western, the second Muslim and eastern. During both wars, the destruction targeted many religious buildings, monuments, and cultural properties including Stari Most (the Old Bridge). After the war, Mostar lost all the bridges that were the primary circulation elements in the city before the war (Bollens, 2012: 98).

The similarity of this case to Aleppo is manifested in the geographic conflicts and the perception of local residents of the divided parts of the city. In Mostar, the division is not a physical partition, but psychological and economical, which in many ways mirrors the situation in Aleppo that has no physical boundaries between east and west. In Aleppo, the city is divided psychologically based on the perception of “the other side” and economically by supplying goods in some areas and not in others depending on the controlling side.

2.3.2. The urban peace-building development of post-war Mostar

Urban peace-building has thus far focused on two strategies: first the creation of a neutral zone that encompasses all the groups, and second, the rebuilding of a physical structure that exhibits a symbolic importance.

The international community's urban strategy was to establish neutral planning that has shared governance and thus can act as a spatial buffer area in order to reconstitute the division in the city (Figure 10). This strategy aimed at using the old confrontation line of the boulevard to transform it into a neutral zone. The goal of establishing this neutral space is to prepare for seeds development that can grow and extend outside the limit of the urban spaces of the other ethnic municipalities.

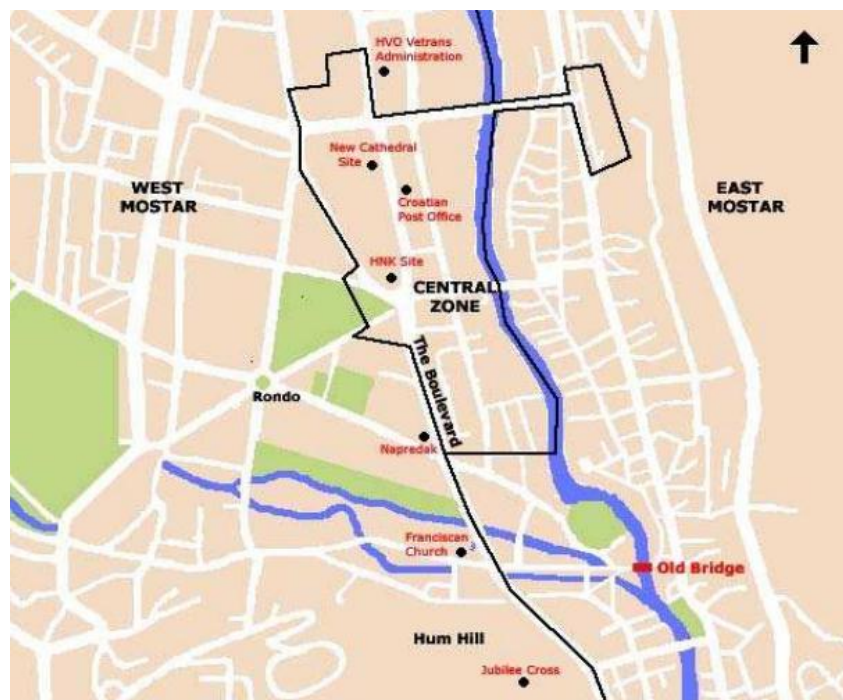


Figure 10. Map showing the location of the proposed neutral zone along the boulevard

Source: Retrieved from Emily Makas. 2007. Institutions along the boulevard in Mostar. (map). Retrieved from <https://uncc.academia.edu/EmilyMakas/Dissertation>

The second proposal was to reconstruct the Stari Most or Old Bridge that linked physically and symbolically both the Bosniaks who live in the east and the Croats

who live in the west as a “societal reconciliation” (Bollens, 2012: 105). The idea was based on reconstructing the historic structure as a means of reconnection. This project was funded by international organization and was opened in 2004. International community officials perceived the project as “metaphoring bridging” and a neutral infrastructure between the two communities since it presents a “non-contentious catalyst” towards the stabilization of Mostar (Bollens, 2012: 105). Moreover, the representative of Bosnia-Herzegovina presented the bridge as a “multi-confessional, and multinational co-existence” (Bollens, 2012: 105) (Figure 11, 12).



Figure 11. Image showing the destruction of the Stari Most Bridge during the Croat-Bosniak war

Source: Retrieved from <http://www.ejiltalk.org/wp-content/uploads/2013/07/Destruction-Mostar-Bridge-BBC.jpg>



Figure 12. Image showing the renovation of the Stari Most Bridge after the war

Source: Retrieved from http://commons.wikimedia.org/wiki/File:Mostar_old_bridge.jpg

2.3.3 Lessons learned

Some economic, social, and political conditions affected the realization of the projects. Socially, the neutral zone was meant to be open to all the groups as a means to dismantle hostilities. While the goals of the reconstruction of Mostar's Old Bridge, aimed at the connection of the divided parts of the city, were affected by economic and political factors, social factors also played a role in reducing the effectiveness of the project. Economically and politically, the project was funded by international agencies and its goal was based on the agreement of the representatives of Bosnia-Herzegovina that the bridge was a multicultural project. However, socially the project did not reach its target as it was perceived by the Bosnian Croats as an imposed symbol.

Goals behind proposing projects like the neutral zone and the rebuilding of a symbolic structure were prominent for a peace building policy. These types of project would work for a future intervention in Aleppo. Taking the case of reconstructing the Old City, the neutral zone like the boulevard should not be funded by a specific, biased group, but should be funded by an agency that constitutes the different players of the affected area. Socially, the reconstruction proposal should not be imposed on the locals, but rather a participatory approach can be applied in order to engage the locals in the decision making. Bollens, advocates for urban peace-building in a way that focuses on managing competing groups instead of disregarding their ethnic differences as a means to establish stability and manageability.

2.4 Beirut, Lebanon

2.4.1 Introduction

The central district of Beirut was the area most affected by the Lebanese civil war (1975-1990). The war had several recognizable phases that included internal and external parties as leading initiators of violence. The first two years of the war comprised urban warfare that targeted the public and state institutions. The war started because of the disagreement between the Christian Maronites and the Muslims over the presence of Palestinian militias (Bollens, 2012: 146). The catalyst of the war took place in the southern suburbs in a contested area (Shyah and Ein al-Rumanneh) in 1975 and then escalated to the center of the city. Street battles took place in public spaces like Martyr's Square (the most notable urban space in the city center). Barbed wire and sand bags were dispersed everywhere in the city as partitions to separate the opposing groups. Most importantly, the green line, a main demarcation line, was created and solidified by walls on both sides, and separated the east side from the west side of the city (Bollens, 2012: 146).

This case's similarity to Aleppo is also evident in the geographic location of the targeted areas. In Aleppo the conflict exploded in the suburbs and moved to the historic center of the city which is parallel to the same instigations that ignited the war in Beirut. The city center in both cases is a place of mixity that includes public amenities and commercial facilities. The souks in Aleppo Old City were the first targeted zones which manifested the dynamic commercial life of the city as a whole. Another point worth mentioning is that rebuilding the city center of Beirut after the war relied heavily on a private company which has a strong commercial agenda and which targeted a certain clientele. It did not engage the locals for its reconstruction

project. Learning from the post-war reconstruction of the Lebanese war is an ample lesson for the establishment of an inclusive urban regeneration plan of Aleppo that enables planners and designers to replicate the successful implementations while avoiding the exclusivity that harms the dynamism of city centers.

2.4.2. Physical changes and the master plan after the war

By the end of the civil war, a 1991 plan was proposed to redevelop the city center as a mixed use center. The project sought to demolish historic buildings and to replace them by modern high rise buildings. Land ownerships would be converted into shares in the company that was holding the project. However, this proposal was highly criticized and was terminated (Bollens, 2012: 180).

Another plan in 1994 was proposed as a replacement of the 1991 plan: it reduced the number of high-rise modern buildings and respected the presence of some of the remaining historical structures. This plan was adopted by the private-share holding company (Solidere) and was approved by the Lebanese government. Interestingly, during and after the civil war, the proposed plans for the reconstruction of the city focused only on the center and neglected large parts of the urban fabric in the surrounding peri-centural areas and suburbs (Bollens, 2012: 197). Consequently, sectarian territoriality was left to work in the city following its own agenda, and thus, the divisions were maintained rather than overcome.

Solidere expropriated all the properties and transformed the property deeds and tenure rights into shares that constituted part of the capital of the company. The planning area covers 472 acres and 40% of it is a new extension towards the sea. When finalized, the project will contain 31% of the roads of the central district, 49% of its

development, 20% of its open public space, as well as religious buildings and state property in 11% of the area (Bollens, 2012: 181).

Concerning the strategies that are followed in the plan, Solidere focused on the rehabilitation of some parts in the city center: a pedestrianization project like the one implemented in the Etoile square, and the transfer of development rights from the archeological sites to the water front to build high rise buildings (Figure 13).

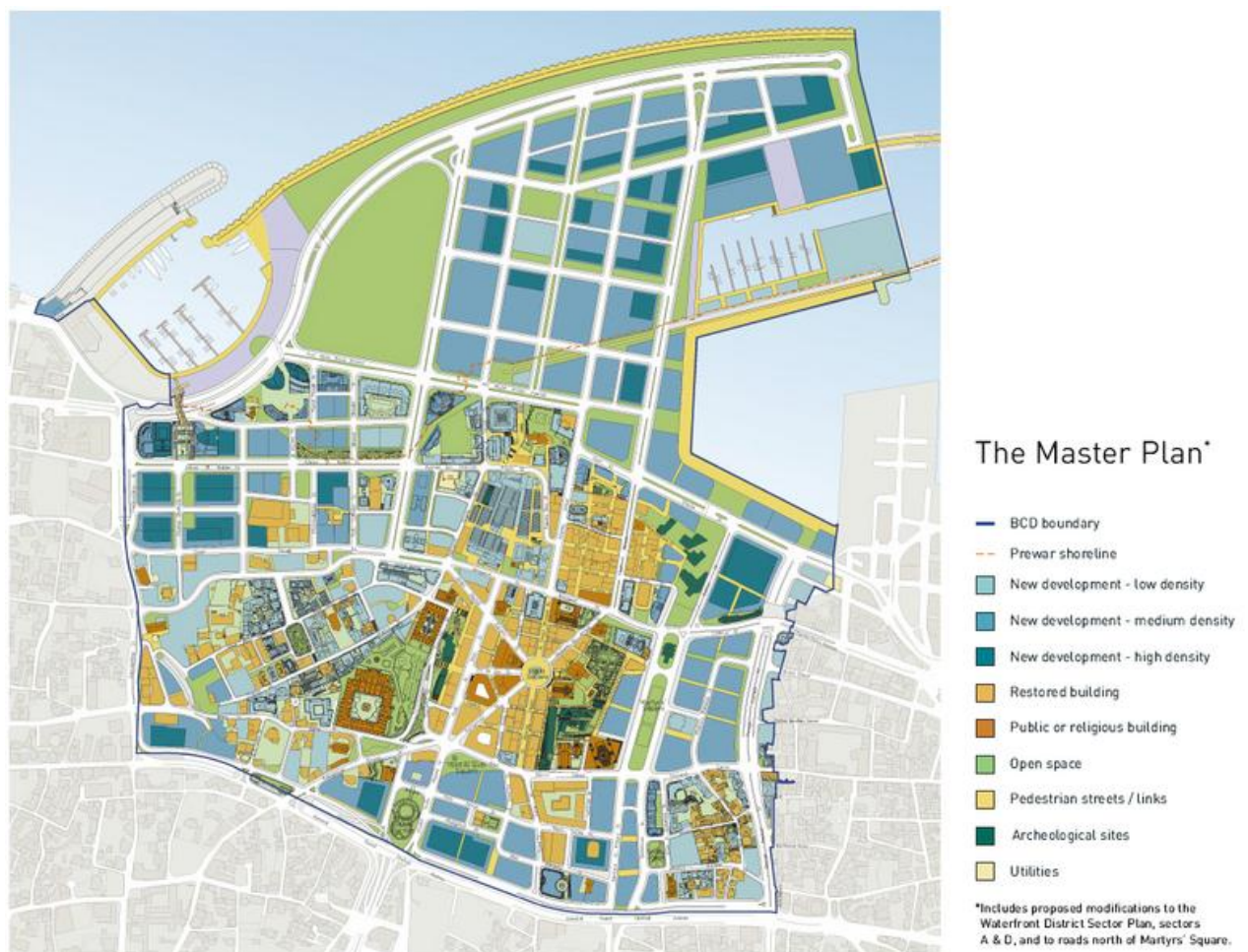


Figure 13. Shows the master plan of Solidere

Source: Retrieved from

<http://therearenosunglasses.files.wordpress.com/2014/01/solideremasterplanpromote8.png>

2.4.3. Lessons learned

In the case of post war reconstruction in Beirut, the city center was reshaped by a different urban style. Before the war the city center was a neutral zone where people used to living in mixity without really caring to which sect they belonged (Bollens, 2012: 190). However after the war, sectarianism has been reinforced through the reconstruction of the city center. The divisions that happened after the war are maintained; sectarianism assures on exclusion and separation, but the neutral zone aims to accomplish inclusion and unity. The post-war reconstruction took place in the city center and not in the west or the east sides as the plan aimed at working in a place that does not favor one part over the other. However, the reconstruction after war took place in a specific area rather than working on a planning strategy that aims at “transforming or modifying sectarian territories” (Bollens, 2012: 194).

Concerning the case in Aleppo, some lessons can be learned in terms of the reconstruction of post-war Beirut, economically, socially and politically. On the economic level, the project attracted foreign investment and specific clientele as it did not target all the residents of the city. Even though the project enabled the city to work on a regional and international level, it did not succeed in working at the city level. Socially, the project did not engage the residents in the decision making, but rather a private company was selected by the government to do the work. Politically, the domination of one specific sect in the city center fortified the sectarian environment. Even though the market zone was re-added to the city center of Beirut as a means to create a neutral commercial zone, the political sectarian environment was the dominating factor in the reconstructed center.

Concerning the case of Aleppo, my proposal focuses on working on the Old City by presenting a neutral reconstruction plan that will shape the intervention. A successful

planning project won't favor one part over the other, but rather it will work in the city to include all the different classes. In the case of Beirut, the weakness of the government role in the reconstruction enabled the different sectarian groups to take actions in the city which reinforced divisions. The actions that will be taken for reconstructing the damaged parts in the city should be taken in collaboration with all the different groups in order to avoid any sectarian development that target a specific group.

2.5. Conclusion

Some cities that are divided by antagonism have adopted neutral approaches for a city-building that is free from ethnic sectarian divide. In the three cases mentioned above, there were attempts to create a neutral place that includes all the antagonistic groups. In the Nicosia case, architects and planners of both sides met to think and plan for the rehabilitation of the Old City one day after the removal of the wall. The case of Mostar, a neutral zone was proposed in the confrontation area in order to transform it into a zone of reconciliation that would transcend ethnic division, and adding to this, the reconstruction of the existing bridge was a means to symbolically link both parts. In the case of Beirut, the attempts of the city center reconstruction were based on a market-led development and meant to target a specific group of users. In the case of Aleppo, which I focus on below, the proposal of my thesis will attempt to concentrate on the urban deliberations in the form of unofficial negotiations for the future reconstruction of the Old City. Negotiations to find satisfactory solutions are the primary strategy for the re-integration of both sides that seeks to normalize and stabilize the city.

To sum up, some lessons can be deduced from the cases mentioned above:

- The proposed places of the intervention after war were all focused on the establishment of a neutral space for the antagonistic groups. In my case, turning the boulevard into a dynamic spine is the goal in my thesis that seeks to attract the dwellers coming from the different regions and also to fund the project by a neutral side.
- The negotiations among the residents in some cases contributed to creating initiatives for reconciliation plans that aimed at reconstruction for the future city. In my case, negotiations between planners and dwellers of the studied area are encouraged in order for the dwellers to take part in the decision making of the post war reconstruction. In my case, this reconstruction seeks to work on the boulevard area.
- In the case of Beirut, the space of urban conflict was transformed into an urban space that focused on economic development. This thesis focuses on allowing a development plan to be implemented, a plan that seeks to encourage the preservation of the urban character of the Old City instead of succumbing to the effects of the market force.
- Urban interventions vary in their realization based on national and international interference that cooperate with city governance. This thesis intends to allow for the collaboration between civil society and the municipality to contribute in the post war reconstruction projects.

CHAPTER 3

AN OVERVIEW OF URBAN EVOLUTION OF ALEPPO

3.1. Introduction

3.1.1. The location and context of Aleppo

Aleppo is located in the north west of Syria. Its location half way between the Mediterranean coast and the Euphrates River made it an important crossroads for pilgrimage routes and trading including the Silk Road, that passed from Iskandaroun as the port opening to Europe in the west to Baghdad and Basra in the east, and on to China (Figure 14). The Quweiq River forms a natural topographical feature along which urbanization spread and was shaped by forms of settlement over many thousands of years. The fortified citadel, with its conical shape that is 50 meters high above the city, became the icon of the city and contributed to its historic growth (Busquets, 2005: 14).

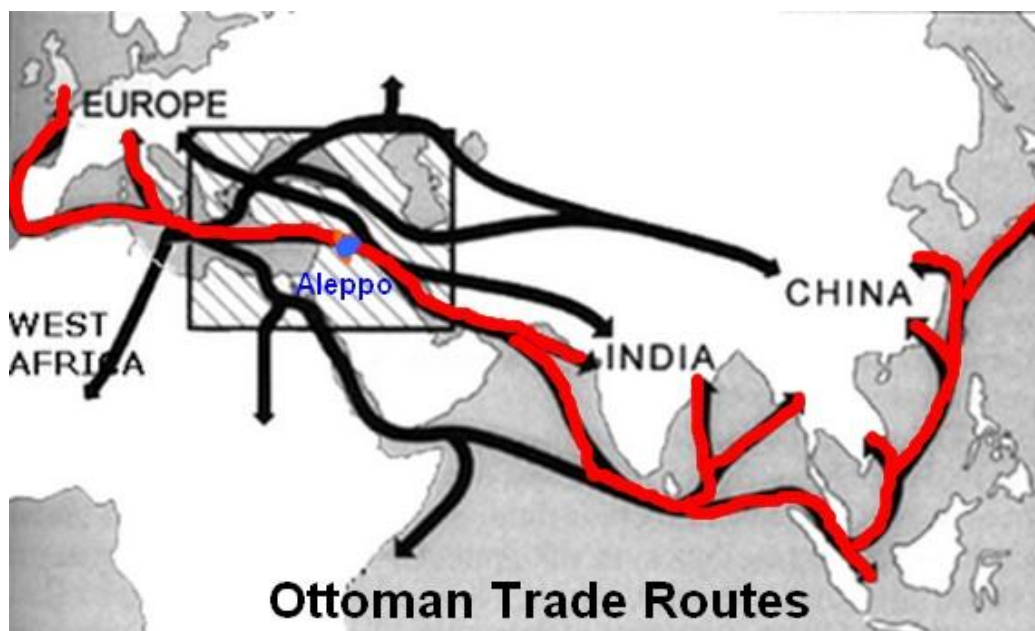


Figure 14. Map showing Aleppo as the main axis of Silk Road and the trade routes from Europe to China

Source: Retrieved from <http://readersupportednews.org/opinion2/289-134/13750-the-dead-pile-up-in-syria-as-historic-aleppo-market-burns>

3.1.2. The urban expansion of the Old City in the Ottoman period

Aleppo was the third most important city during the Ottoman Empire after Istanbul and Cairo when commercial activities were thriving in the fifteenth and the sixteenth centuries. During this period, the city extended outside the city walls and new suburbs grew, like in the area of Jdeideh to the north and Banqusa to the east (Bianca, 1980: 11) (Figure 15).



Figure 15. Map showing the expansion of the city outside the city walls in the areas of Banqusa and Jdeydeh in the 18th century

Source: Marcus, A. In: Marcus, A. *The Middle East on the eve of modernity: Aleppo in the eighteenth century*. Columbia: Columbia University Press, 1989, p.318

However these commercial activities later declined because of the new connections by sea that replaced the traditional caravans which used to traverse Aleppo. Declining trade after the seventeenth century caused the stagnation of urban development and

the city stopped expanding until the nineteenth century. Consequently, the Old City was able to maintain its traditional form (Bianca, 1980: 12).

3.2. The structure of the Old City: Distribution of residential and commercial parts

3.2.1. The “intra muros” city

The city form today is the result of successive civilizations: Roman, Hittite, Persian, Arab, Mongol, Mameluk and Ottoman. The city center, called Medina, is built on the ruins of a gridded Hellenistic town (Figure 16). In the Ottoman period it contained most the public facilities: souks, storehouses (Khans), public baths (hammams), schools (madrassahs), and mosques. However, the private dwellings are located in separate areas. The mosque and the souks are the primary features that define the Medina where the mosque occupies the former agora. Mosques and hammams are also located on important cross points where the passages of the residential areas meet the main roads (Figure 17, 18). Accordingly, the medina acts as commercial hub in the Old City where it contains all the public amenities (Bianca, 1980: 12, 14).

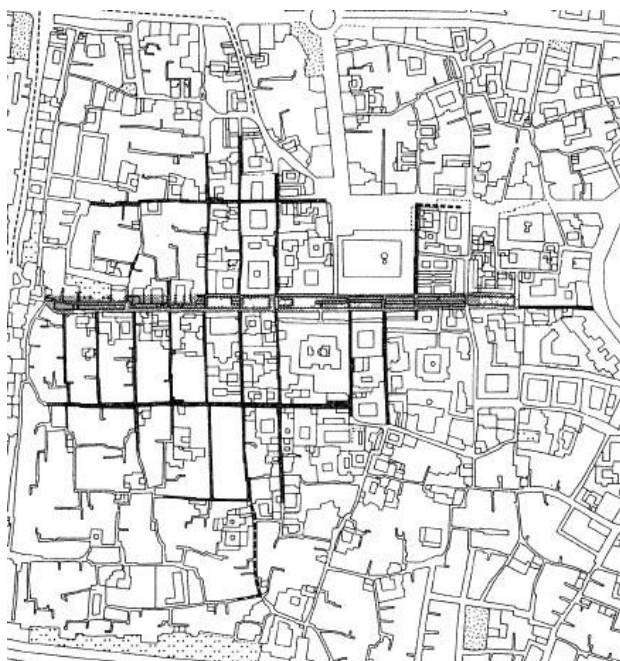


Figure 16. Map showing the medina that was built on the Hellenistic grid

Source: Gaube, H., & Wirth, E. In: Gaube, H., & Wirth, E. *Aleppo: historische und geographische Beiträge zur baulichen Gestaltung, zur sozialen Organisation und zur wirtschaftlichen Dynamik einer vorderasiatischen Fernhandelsmetropole* (Vol. 58). Wiesbaden : L. Reichert, 1984, p.120.

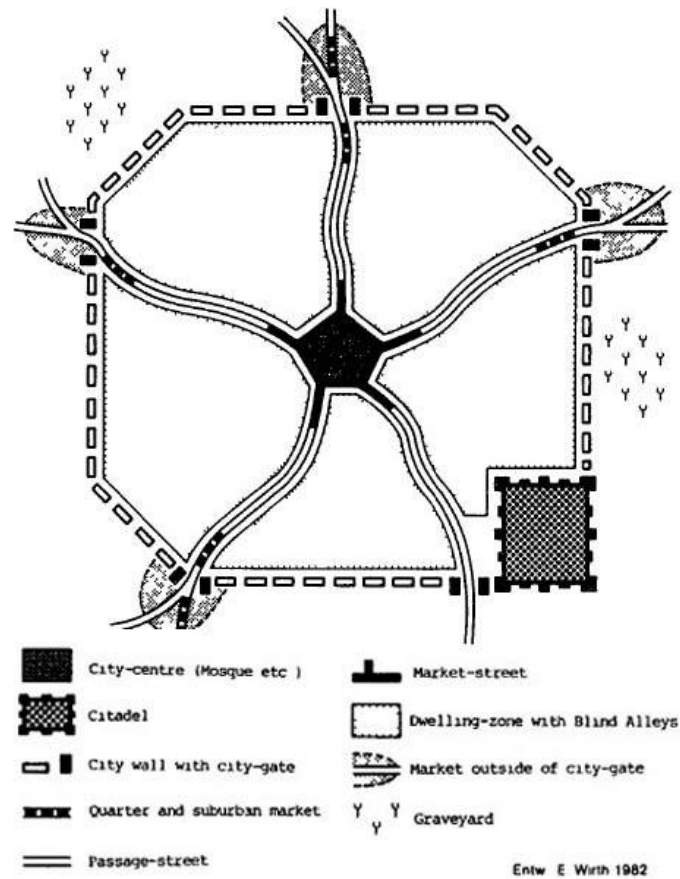


Figure 17. Shows the traditional structure of Aleppo before its first expansion

Source: Gaube, H., & Wirth, E. In: Gaube, H., & Wirth, E. *Aleppo: historische und geographische Beiträge zur baulichen Gestaltung, zur sozialen Organisation und zur wirtschaftlichen Dynamik einer vorderasiatischen Fernhandelsmetropole* (Vol. 58). Wiesbaden : L. Reichert, 1984, p.61.



Figure 18. Image showing the souks of the medina where people interact and communicate

Source: Retrieved 2014 from <http://thelifelesstravelled.com/2012/10/the-beautiful-burning-souk-of-aleppo.html>

3.2.2. The “extra muros” city

Ethnic migrations can lead to the foundation of new town units which are separate from the core of a city and also can lead to the informal growth in the suburbs. This growth outside the walled city is described as “extra muros”. The quarters are bonded to the main gates of the walled city and expand where the main routes of caravan traffic are located, such as in the area of Bab Al Hadid on the north east of the walled city (Bianca, 2000: 141). The location of these suburbs and their development patterns explains their geographical location that is adjacent to their rural catchment areas. These suburbs are connected to the center through spines that ensure the communication between the “extra muros” and the “intra muros”.

3.2.3. The city gates

The gates of the walled city present “important secondary centers of the urban system” (Bianca, 2000: 148) since they act as checkpoints which monitor the merchandise and goods brought from rural areas. The gates act as a “filter” that control the flow of people, animals, and goods to avoid congestion in the inter circulation system. Consequently, these gates help to manage the shift from the public to the private spaces through the spines which establish “functional continuity” between the center and the gates (Figure 19). The spines are lined with shops on both sides hiding behind them the residential units, protecting them from uninvited interruptions (Bianca, 2000: 148, 150).

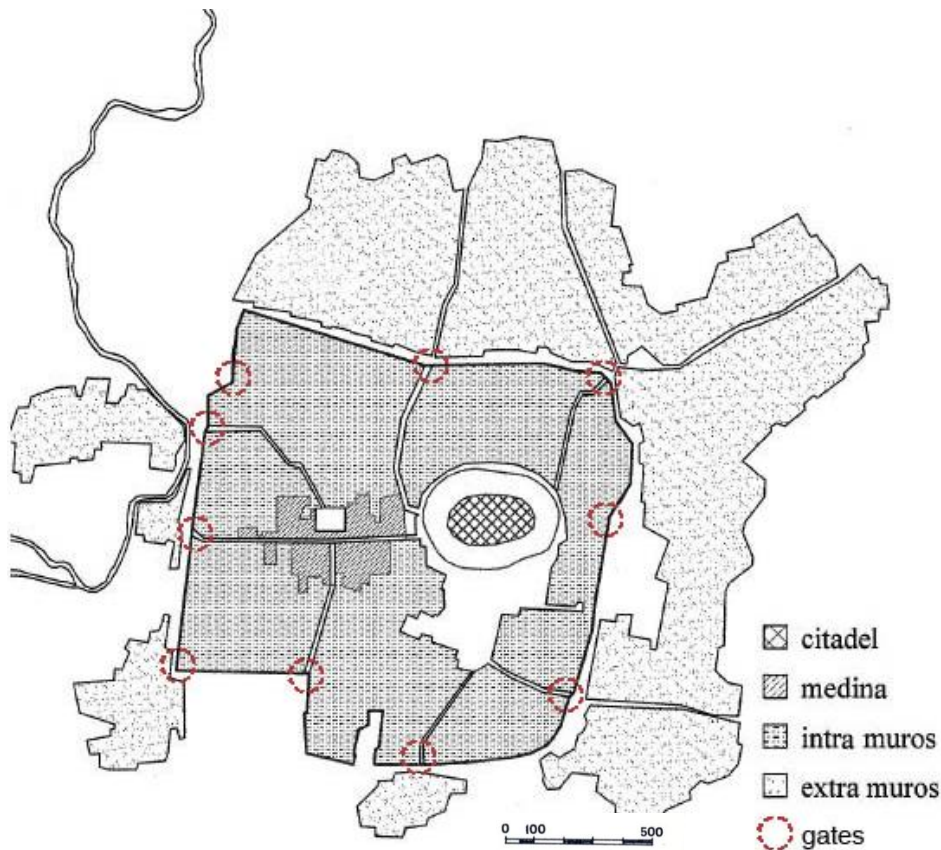


Figure 19. Map showing the structure of the old city in the 19th century that consists of the medina, the citadel, the intra muros, the extra muros, and the gates

Source: ROĞLU, E. A. M. (2005). The Transformation of Urban Space at the Conjunction of the Old and New Districts: The City of Aleppo (Doctoral dissertation, Middle East Technical University).p.22

3.2.4. The pedestrian network in the city

The pedestrian network is based on a hierarchal system that moves from the public to the private areas. It passes from primary streets to secondary streets till it reaches the blind alleys where it gets to the doors of the residential units. The alleys in the residential areas are narrow and range between two to three meters wide (Figure 20). In the residential quarters, because of the privacy feature that is dominated in the traditional city, the houses don't open directly to the street which presents the public domain. Therefore, the alleys leading to the houses are lined with the continuous walls except for the doors and the limited openings of the windows (Bianca, 1980: 14).



Figure 20. Image showing the narrow street in the residential areas

Source: Retrieved 2014 from

<http://www.flickrriver.com/photos/gustavothomastheatre/sets/72157631660560588/>

The fine network of the passageways creates direct connections between the different parts of the city. Consequently, the city works as a base of communication that the contemporary trends in urban design and planning seek to accomplish in order to increase the dynamic of circulating information in the city (Lampugnani, 2005: 26). The historic city is the encounter of physical, intellectual and emotional continuity that enables the sharing of different identification of the city since it promotes the composition and the refinement of the community (Lampugnani, 2005: 29). Accordingly, the historic city is allied to human life since it produces connectedness and authenticity.

3.3. The historic evolution

3.3.1 The expansion towards the east (outside the city walls)

From the 13th century till the 19th century, the Old City of Aleppo expanded to the east to include suburbs outside the city walls. This expansion specifically became evident first during the Ayyubid period. The investigation of the expansion of this area clarifies the urban expansion eastward in three periods: Ayyubid, Mamluk, and Ottoman.

3.3.1.1. The expansion towards the east in the Ayyubid period

During the 13th century, the city expanded towards the east and the citadel was enclosed by new walls. Some fortifications were reorganized and a new structure was built between the extra muros neighborhoods along the old Roman trench: a wall to protect the extra muros parts of the city (Neglia, 2009: 198) (Figure 21). The expansion in the Ayyubid Period took place outside the walls that had existed during the Roman period on the already planned agrarian lots. This expansion was due to over densification in the walled city which led to the development of the suburbs on the north and east sides (Raymond, 1998: 98) (Figure 22). However, this expansion got more introverted rather than widespread as it was in the Roman period, and the city began to be subdivided into “self-sufficient districts” with primary services such as bath, mosques, madrasa, and souks. (Neglia, 2009:194-200).

During this period, the specialization of the souks was codified based on the commercial functions such as leather souks, and soap souks, and some neighborhoods were specialized in the production of these goods. The dispersed urban fabric became

congested as the residential structure did not follow the geometric rules of the Roman plans. Thus, “the medievalization process” began with the settlement of new social groups on the Roman urban configurations. Consequently, this period presented the transition from the agrarian stage to a semi-urban stage.

This new extended area between the walls of the Roman and the Roman trenches was inhabited by Turks, Arabs coming from the Mesopotamia area, and traders who resided outside the city walls on the main caravan routes. While the expansion to the north outside the walls contained warehouses, the expansion to the east was manifested by the establishment of the activities attached to the caravansaries. The urban expansion on this side was a form of replication of the city services like souks, khans, mosques, and hammams. Consequently, this eastwards expansion outside the city walls presented an autonomous urban agglomeration (Sauvaget, 1941: 147).

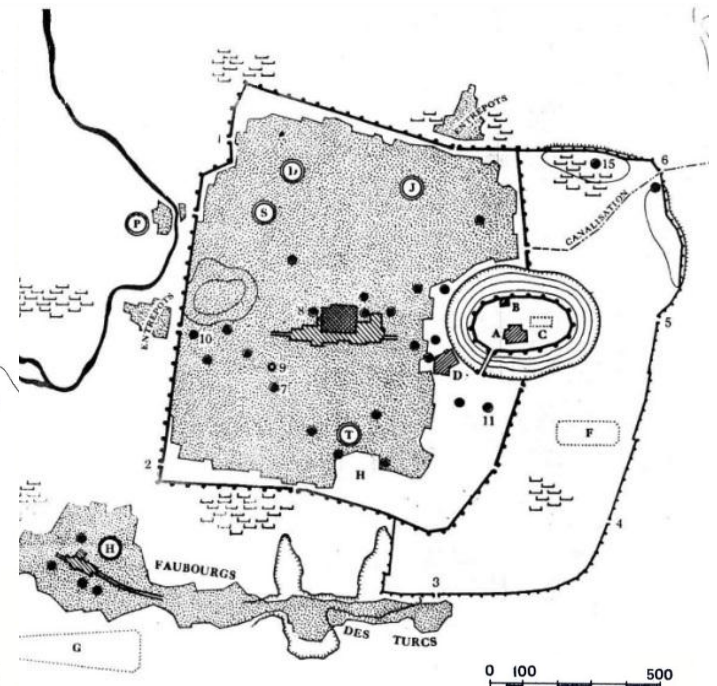
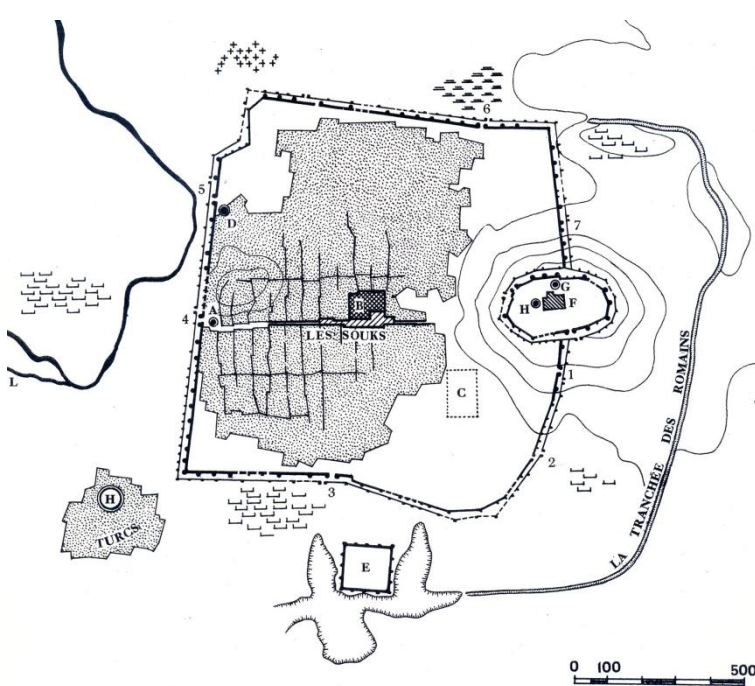


Figure 21. Map showing the plan of Aleppo city during the 11th century before the Ayyubid period

Source: Sauvaget, J. (1941). Alep: essai sur le développement d'une grande ville syrienne, des origines au milieu du XIX^e siècle. Texte (Vol. 1). P. Geuthner.

Figure 22. Map showing the plan of Aleppo city at the end of the 13th century during the Ayyubid period

Source: Sauvaget, J. (1941). Alep: essai sur le développement d'une grande ville syrienne, des origines au milieu du XIX^e siècle. Texte (Vol. 1). P. Geuthner.

3.3.1.2. The expansion towards the east in the Mamluk period

During this period, the city was attacked by the Mongols, causing the substantial destruction of myriad buildings inside the walled city. The expansion of the city accelerated as an increasing number of public buildings were constructed outside the city walls. During this period, the character of the suburbs started to change towards an urban style. The north-east part of the city constituted the main international commerce road where the gate of Bab Al Hadid exhibited the transitional point between the walled city and the route leading to Persia (Figure 23). This period is considered the passage from the Roman-Byzantine city to the Islamic medieval city and the beginning of urban development of medieval Aleppo (Neglia, 2009: 201). The commercial activities contributed to the establishment of some services for the caravansary traffic; a customhouse, souks, and khans which were established along the way of the commerce road (Sauvaget, 1941: 176).

The north-east area had the characteristics of a suburb as it constituted immigrants and other less affluent occupiers when compared to the residents of the walled city (Sauvaget, 1941: 174). The social structure differed between the walled city and the extra muros part of the suburbs. The area was inhabited by Kurds, and other Bedouins who were in charge of the stables of the caravansaries.

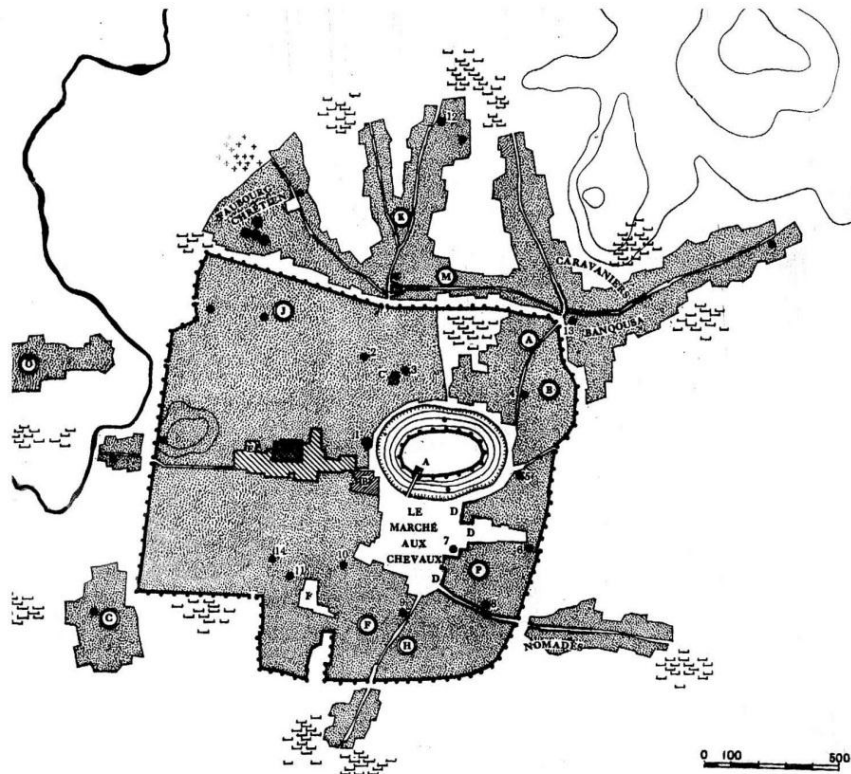


Figure 23. Map showing the plan of Aleppo city at the beginning of the 16th century during the Mamluk period

Source: Sauvaget, J. (1941). *Alep: essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXe siècle*. Texte (Vol. 1). P. Geuthner.

3.3.1.3. The expansion towards the east in the Ottoman period

During this period, the suburbs expanded to a great extent to the northeast of the city and started to be more urbanized. The construction of public and religious buildings intensified and administrative regulations were implemented (Figure 24). The road linking the walled city through Bab Al Hadid leading to Persia continued to be the focal point of the clusters of caravansaries and the other commercial and trade complexes. In addition, the activities that spread in this area were attached to caravansaries such as the all-important horse market, warehouses, blacksmith's shops, and also food markets. Today's place names reflect the old neighborhood usages. Various social and ethnic groups occupied the area; Kurds, Turks, Bedouins and local country people (Sauvaget, 1941: 230). The area's vigorous commercial transactions attracted the janissary militias who aimed to control the commercial activities of the tanneries. The residences reflected the wealth of their occupiers; the intra muros was

occupied by the sharifs, who resided in large houses, and the extra muros area of Banqusa by the janissaries of higher status and by other social groups of lower standing (Raymond, 1998: 318-320). In addition, this area in its turbulent spirit contained mutineers, the discontents, and the dissatisfied (Sauvaget, 1941: 231).



Figure 24. Map showing the plan of Aleppo city at the middle of the 19th century during the late Ottoman period

Source: Sauvaget, J. (1941). *Alep: essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXe siècle*. Texte (Vol. 1). P. Geuthner.

During the 16th century under Ottoman rule, administrative regulations were a prominent practice. The act of waqf (religious endowment) was applied to the big enterprises surrounding pious buildings, and commercial buildings such as caravansaries, souks and hammams which explains the numerous waqf buildings that remain in the Banqusa area (Raymond, 1998: 130, 142).

From readings concerning Aleppo's urban growth, it can be deduced that the expansion after the Roman period is well manifested in the Ayyubid, the Mamluks

and the Ottoman as a part of the “medievalization process”. The city expanded eastwards supporting the overland trade routes by the establishment of activities related to caravansaries. In addition, different social and ethnic groups, especially the less affluent, occupied the area outside the walls in the medieval period until the end of the Ottoman period. Throughout the phases of the medieval period, the city noticeably moved from rural (Ayyubids) to semi-urban (Mamluks) and then urban (Ottomans). The urban development of the western part of the city started after the end of the Ottoman period, at the beginning of the French mandate period from the 1920s which was directed to modernization whose main feature was the movement system through cars.

3.3.2. The expansion towards the west (outside the city walls)

In the period between 1831- 1840, the “Serail” was created as a new central administration. After this period, from 1868, a western style municipality was established. At this time, the Azizieh district to the west emerged, separated completely from the Old City and its walls. This district is characterized by wide streets and a chessboard plan. It was inhabited by the Christian middle class. Another expansion outside the walls of the Old City took place in the west in 1882 in Jamilieh and Ismaeliyeh, close to the orchards of the Quweiq River. These districts were occupied by the Muslim and the Jewish middle classes. Other new residential areas were built in the period of 1887 and 1907 in the north, in the north-west and the west. In addition, the construction of the railway in 1905 also contributed to speeding the urbanization process (Bianca, 1980: 20).

The establishment of a new center besides the Medina took place to the west in 1882, starting on the edge of Bab Al Faraj. In this area several activities were exhibited

which constitute the elements of a modern center such as: (mechanical workshops, hotels, restaurants, coffee shops, offices, cabarets, and theaters). Particular essentials contributed to the flourishing center on the west: the occupation of the area by the middle class, the connection to the Medina through Bab Al Faraj, and the existence of waqf lands for investment on the west that allowed for urban growth in that direction. This opportunistic expansion took place between the walled city and the orchards of the Quweiq River which was the only site that was available to extend into (Figure 25). Interestingly, as the suburbs of the Old City had expanded to the north and the east sides, they did not really take their part in the modernization process as the west side did (Bianca, 1980: 20).

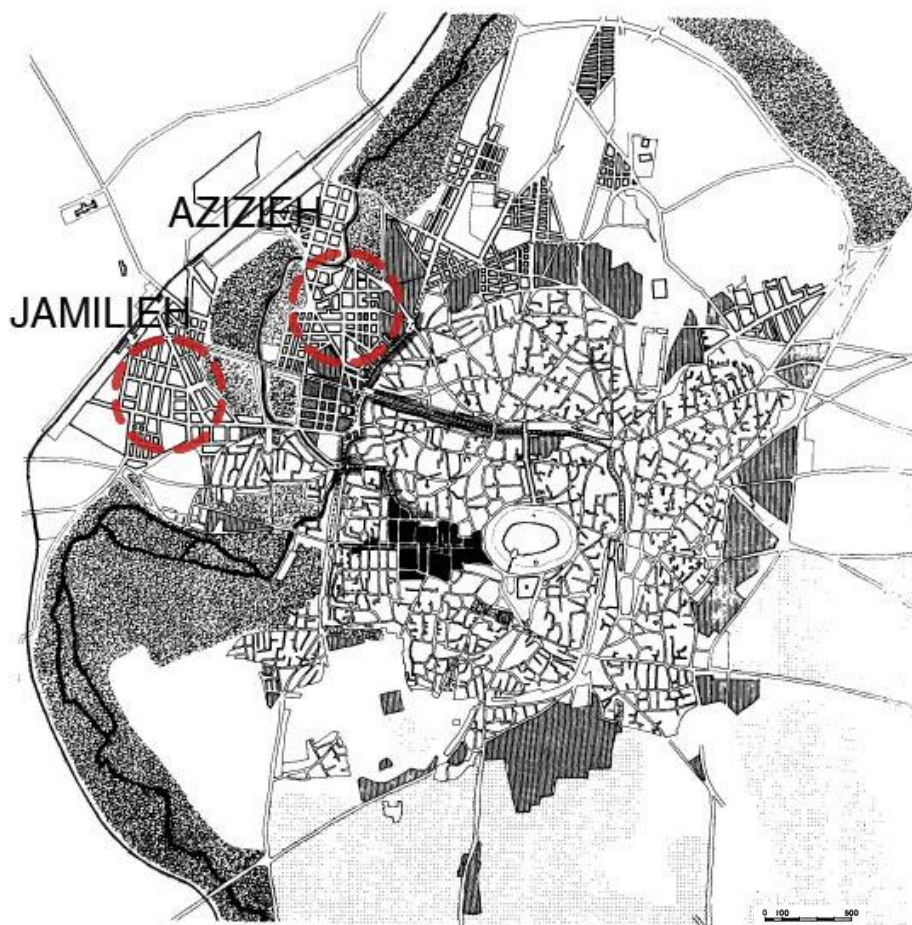


Figure 25. Map showing the expansion of the city to the east in Azizieh and Jamilieh that takes the form of the western grid

Source: Unesco. *Aleppo in 1930* [map]. In: Unesco. *The Conservation of the Old City of Aleppo*. Paris: Unesco, 1980, p.18.

3.3.3 The early planning applications

During and after the First World War, large scale town planning was undertaken. The goal was to enhance the connection between the new center to the west, the Medina and the other residential districts. One of these projects was initiated in 1893 and transformed the moat to the north of the walled city into a street 14 meters wide, lined with residential blocks, hotels, and warehouses (Bianca, 1980: 27).

3.3.4 The pre-independence plans

Between 1931 and 1938 some plans were produced like “Plan d’aménagement, d’embellissement et d’extension d’Alep” by the Danger brothers and another plan called “Projet d’urbanisme” by Ecochard. These plans followed the style of planning in European towns and proposed many crossings of grid networks to be imposed on the Old City following the new rules that were to be implemented on the new extensions of the city. However, most of these plans were not executed because of the opposition of the inhabitants of the Old City and the difficulties in acquiring real estate to execute the plan.

3.3.5 The 1954 master plan

A new master plan, which was proposed by Gutton in 1954, had serious effects on the Old City. It suggested implementing two large roads to cross the Old City in order to create a link from the sea on the west to the desert on the east. In addition, a ring road around the Medina was proposed in order to provide the Old City with traffic access to its commercial areas. This proposal concentrated on the idea of “degager pour

mettre en valeur” which meant that clearance created by the roads would showcase the city as a monument (Figure 26). Gutton mentions that quarters were defined by race and religion but that the division was not imposed but voluntary; therefore, in this case the division should be respected as it reflects people’s desires. Consequently, his proposal for the roads crossing the Old City creates a spatial division as a means to create a homogenous social entity and also to separate pedestrian from vehicular movement (Khechen, 2004: 72, 73). Moreover, this approach contradicts the dominant typologies of the Old City where the residential houses turn inwards to courtyards as privacy is the primary characteristic of much old Islamic architecture. The plan aimed to show the citadel as the focal point, the ring road surrounding the Medina. Outside the walls, new residential western-style developments were meant to take place on the west and north while the east and south were represented as a “New Arab town” (Bianca, 1980: 28). Only parts of Gutton’s plan were executed. However, his approach was echoed in the municipality’s subsequent projects. Development took place in the western parts of the city while the eastern part was neglected. Even the new master plan by Banshoya in 1969 followed Gutton’s study, but showed more consideration for the Old City (Bianca, 1980: 27, 28, 31).

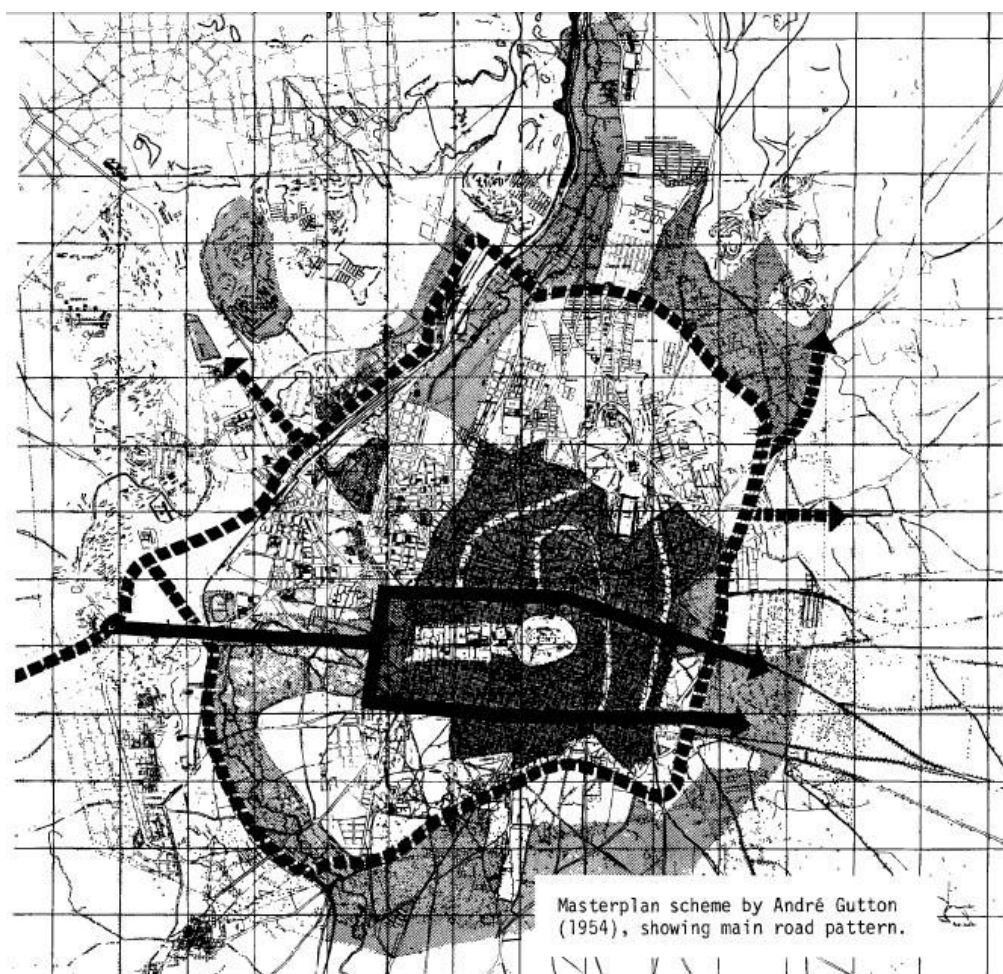


Figure 26. Map showing the master plan scheme and the main road pattern proposed by Gutton in 1954

Source: Unesco. *Master plan scheme by Andre Gutton (1954) showing main road patter* [map]. In: Unesco. *The Conservation of the Old City of Aleppo*. Paris: Unesco, 1980, p.29.

3.3.6 The 1970 master plan

The 1970 master plan of Banshoya showed more respect for the Old City. His proposal for its conservation was by introducing modern elements as a way to activate the old fabric (Matsubara, 2008: 10). Gutton's proposed ring road to surround the Old City was eliminated and replaced by cul-de-sacs as access roads to the commercial areas. He proposed parking lots to serve the caravansaries (khans) that constituted the base of the old souks (Figure 27). However, he also proposed an axis cutting from the north to the south and two other roads on the north sides which were executed. The

1970 master plan was also problematic because it did not differentiate between the Old City and the new expansion. The plan allowed traffic access to the new center, but it did not respect the pedestrian network in the Old City. Typically, specific types of activities would be attached to the vehicular roads which would add a growing development impact. Moreover, the character of the traditional town does not allow for such development as it has a particular architectural typology and urban scale that only allows for limited developing activities along the vehicular roads. Introducing wide vehicular roads in the traditional city, juxtaposed with high-rise buildings on the sides of the road, would have been odd for the human scale of the old urban fabric (Bianca, 1980: 31).

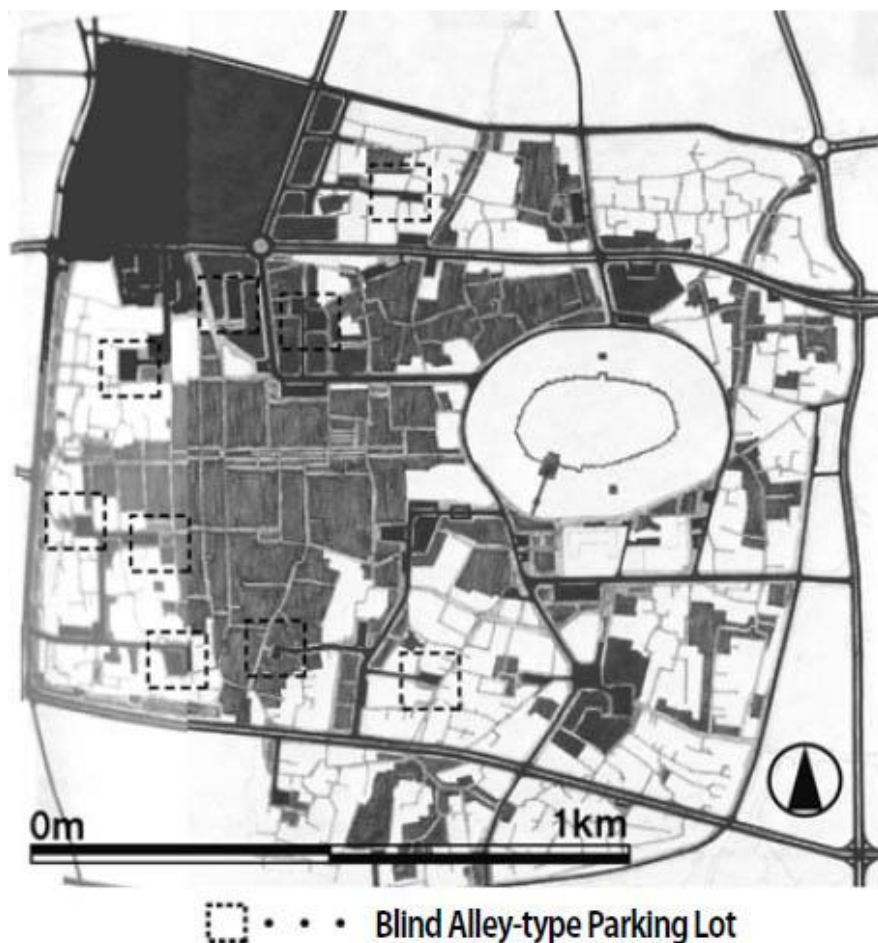


Figure 27. Map showing the master plan that was proposed by Banshoya in 1970 for the Old City and the cul-de-sac proposal as a means to serve the commercial center
Source: K. Matsubara. In: K. Matsubara. *The works of Gyoji Banshoya in the Middle East and North Africa*. Journal of City Planning Institute of Japan, 2008,43(3), p. 11.

3.3.7 The initiation of the conservation

Because of the amount of destruction to heritage monuments that was caused by the previous urban development plans, in 1967 the Ministry of Culture announced that monuments in the intramural parts of the Old City as well as some parts of the historic fabric around them would be considered as a national historic monument. In 1979 the municipality of Aleppo requested the support of UNESCO in the preservation of the Old City to help protect it from further damage. Destruction in the name of progress had fostered a growing awareness of the serious consequences and the resulting damage to the Old City (Bianca, 1980: 25). In 1982 the entire historic intramural city was declared to be under protection and, in 1985, the Directorate of Antiquities also included extramural parts of the Old City as protected zones. The designation of the intramural Old City as a United Nations World Heritage was made in 1986. This delay, however, allowed the municipality to continue working on the plans of Banshoya. Aleppo preservationists pushed the plan for preservation to include the now-demolished parts and the modernized parts of the Old City. According to Syria's Historic Monuments Law 222, the regulations for preservation were imposed on all the buildings in the Old City regardless of their damage or architectural value. This law put limits on the morphological transformation of the Old City, but at the same time it froze its development (Khechen, 2004: 77, 78).

3.4. The historical importance of Bab Al Hadid area

The road from the medina to the Bab Al Hadid area was one of the most important roads of the caravans. Bab Al Hadid is the entrance road of the caravans coming from the east side. Therefore, there were many large Khans and souks which were as

important as the ones in the medina. After the change in the transit road and the trading system, the importance of Bab Al Hadid was lowered as a regional gate that connects the eastern regions (Nakabayashi, 1989: 11). Outside the city walls residential quarters have spread following the old city's landuses. These include cemeteries, in addition to a commercial spine that acts as semi-public space for the residential quarter as it has commercial and industrial activities. This commercial spine is located at the edge of the old city which facilitates the movement of goods to and from the souks in order to serve the residents of the quarter and also the nearby other quarters. The urbanization process that took place in Bab Al Hadid area transformed the ownership of lands and buildings. Two types of change are recognized: one that is accompanied by the widening of the street which caused the transfer of charitable waqf and private ownership to governmental property; the other is the transfer from familial waqf to private property. These transformations in ownership happened with residences, baths, khans, and mosques (Nakabayashi, 1989: 11) .

3.5. Conclusion

Based on this historical overview, the urban evolution got clear through the chronological description of the city's urban expansion. From the understanding of the urban structure of the old city that constitutes of the extra muros, intra muros, and the gates, and their evolution it can be deduced that the urban expansion and development was directed to the east from the 13th century till the 19th century and then it shifted completely to the west from the beginning of the 20th century. This urban growth is translated into maps that show the different types of the urban growth

and its social effects on the different parts of the old city through years. This reading of the social and the urban effects of the urban development enables us designers to propose urban planning and design intervention that fit within the urban and the social context that resulted from previous urban practices.

CHAPTER 4

CASE STUDY PROFILE

4.1. The case study (Qadi Askar Boulevard) plan

As a part of modernizing the city, some streets were widened as mentioned above in order to allow for vehicular flow. During the 1970s a vehicular road was proposed by the municipality to the north east of the extra muros area of the old city (Figure 28). It was meant to create a link between the east and the west parts of the city following the concepts that were proposed by the modernist foreign planners that were brought by the government from the 1930s till the 1970s.

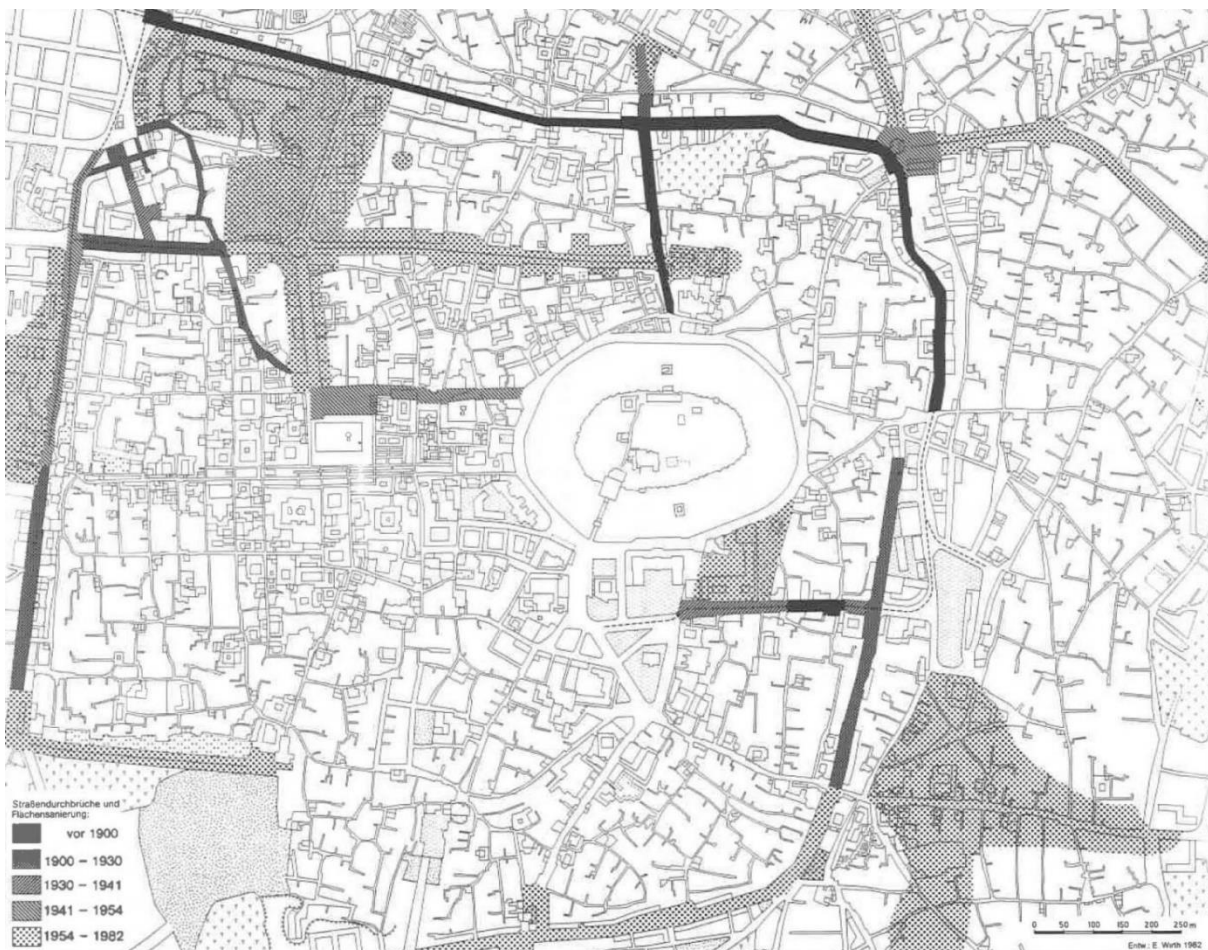


Figure 28. Map showing the chronological construction sequence of the streets

Source: Gaube, H., & Wirth, E. In: Gaube, H., & Wirth, E. *Aleppo: historische und geographische Beiträge zur baulichen Gestaltung, zur sozialen Organisation und zur wirtschaftlichen Dynamik einer vorderasiatischen Fernhandelsmetropole* (Vol. 58). Wiesbaden : L. Reichert, 1984, p.50.

This plan was executed as a two-way traffic road on the top of the existing old fabric as a means to facilitate the connectivity of the old east part that had not been subjected to any type of modernization. In addition, an urban development plan was proposed which consisted of executing high-rise buildings on both sides of the boulevard. However, this plan was not implemented except for the road. Its implementation caused old buildings to be destroyed or even cut in half, with temporary facades as a treatment for the resultant damage. It also created undefined open neglected spaces. The opening of the road had negative impacts on the previously interwoven social fabric of a single one neighborhood that was now cut into two. This act of modernization in this part of the Old City did not accomplish its target for urban and social improvement, but can be said to have exacerbated the social difference when compared to the urban and social improvements that occurred on the west side of the city. The urban and the social consequences of this implemented traffic road will be explained further in the next chapters. Moreover, in the current war in Aleppo, the main center of the eastern rebellions took place in this less developed area of the old city.

4.2. The social structure of the city

4.2.1 Socio-spatial characteristics

Aleppo exemplifies a mosaic of socio-spatial characteristics. The middle and the upper income groups reside in the areas to the north and west of the old city. The low income groups and the rural migrants occupy the eastern and the southern quarters of the old city. The geographical stratification of the city that is based on income is found in accordance with urban development that shaped the city in two patterns:

first, the development of the western area into new residential clusters for middle income groups between 1965 and 1975; and second, the rural migrations and the spontaneous settlements that took place in the east, the north east, and the south east of the old city since the 1950s (Khechen, 2004: 59).

Moreover, the densities vary between neighborhoods of the east and the west sides. The reasons differ based on the property subdivision, family size, land use and the presence of multi-story buildings. Studies show that: high density areas exceed 350 persons/hectare, medium density areas range between 250-350 persons/hectare, and low density areas have less than 250 persons/hectare. Western intramural areas have lower density because of the replacement of housing by commercial enterprises. However, the eastern quarters have high residential densities. The fact of the east part being the poorest is reflected in the poor condition of the dilapidated buildings and the bad conditions of the houses (Khechen, 2004: 60-61).

4.2.2. Socio-economic characteristics

The current old city inhabitants are considered on average to belong to a low income group. They work in commerce, crafts, the food sector, the public sector, the construction sector and other services. Their educational level is lower than the rest of the city. Concerning the property ownerships in the old city, rough estimates show that 60% of the residents of the old city are owners and the 40% are tenants (Khechen, 2004: 61).

The morphological structure of the neighborhoods varies from one quarter to another and even within the same neighborhood. Each area has its own spatial character:

Building typologies and architectural value differ from one area to another in the old city. The variation in the socio-economic level is reflected in the neighborhood architectural typologies. The extramural western part is different in the size of the houses and the courtyards if compared to the eastern parts. The eastern extramural part is the poorest and its residents are mainly from the rural areas. Some neighborhoods are more heterogeneous in the demographic or the ethnic origins except for the Bab Al Hadid and Bab Quinisreen areas, and al Jaloum, (Khechen, 2004: 60).

4.2.3. The neighborhood structure

The quarters (Al Ahya') in Aleppo were socially homogeneous as they incorporated members of different ethnic, occupational and income groups. They formed "parochial solidarities" to defend themselves collectively against other groups, and to serve as administrative management with the neighborhood headmen who acted as intermediaries between the residents and the authorities (Marcus, 1989: 315). The quarter (Al Hay) was a main forum where the residents took an important role in the public life as they confronted their issues of daily life: internal management, the distribution of services, tax collection, and the factional competition of power. The sociability which strengthens ties among residents was more evidently displayed in the quarters: conversation, leisure, coffeehouses, baths, private parties and the casual neighborhood street life. The boundaries by which the private and the public zone were defined in daily life are well illustrated in the quarters: practicing the public life of the give-and-take of neighborhood relations defines the rights and duties of the

individual towards the group, and practicing the limit of the privacy imposes a weight that is practiced by the collective (Marcus, 1989: 314).

Aleppo is composed of neighborhoods, each containing thousands of addresses listed in the court records. One third of them were located in the intramural part and the rest are outside the walls. In the 18th century the authorities assessed most of the streets as separate tax collection areas and the rest were combined to form new neighborhoods (Marcus, 1989: 316). Interestingly, the city in the 16th and the 17th century did not experience an expansion in the neighborhood landscape. The number of the neighborhoods increased due to the subdivisions of existing neighborhoods (Figure 29). This process produced modification in the residential divisions rather than any conception of urban organization. Moreover, the neighborhoods shrank or expanded was based on immigrations of families, and thus the number of houses was affected because of the division or the change of the land use (Marcus, 1989: 316).

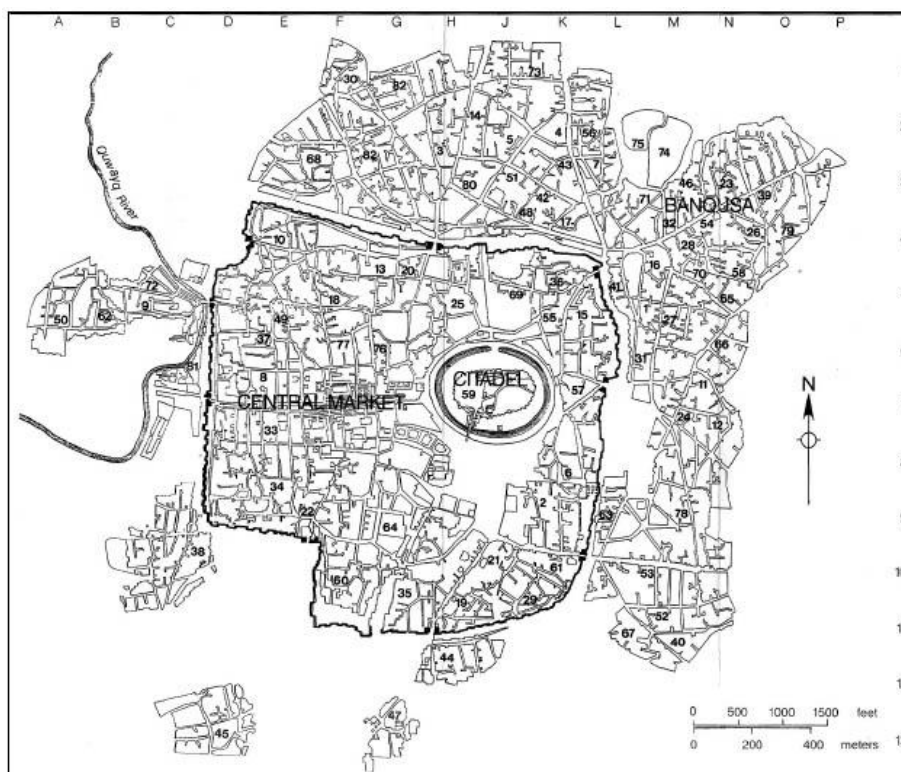


Figure 29. Map showing the subdivision of the neighborhoods in the 18th century
Source: Marcus, A. In: Marcus, A. *The Middle East on the eve of modernity: Aleppo in the eighteenth century*. Columbia: Columbia University Press, 1989, p.280

Neighborhoods varied in wealth and social levels. There was no neighborhood inhabited by a single group. If a quarter began originally as homogenous settlements, the dynamics of daily life introduced variety in their midst and changed their original character. Even minorities did not enclose themselves in exclusive ghettos as they always lived with a large Muslim population: Jewish families lived close to Muslim families in the Bahsita area; and in the north part of the Old City which was occupied by Christians, their fine homes and their thriving industrial enterprises attracted Muslim artisans and businessmen. Different parts of the city have their economic spatiality which affects the occupational structure accordingly. In the area of Bab al Hadid where the Banqusa mosque is located many streets acquired their names according to the organized profession of the neighborhoods: The Furries (al-farra'in), caravan guides (al-dallalin), and the messengers (tatarlar) quarters (Figure 30). These names survived after the 18th century; yet, the social structure of the neighborhood is changed as the original occupiers left the neighborhood (Marcus, 1989: 317, 318).



Figure 30. Map showing the numbers of the quarters and their names that follow the professions of the occupiers in the 18th century: 23-Al Dallalin; 26- Al farra'in; 79: tatarlar.

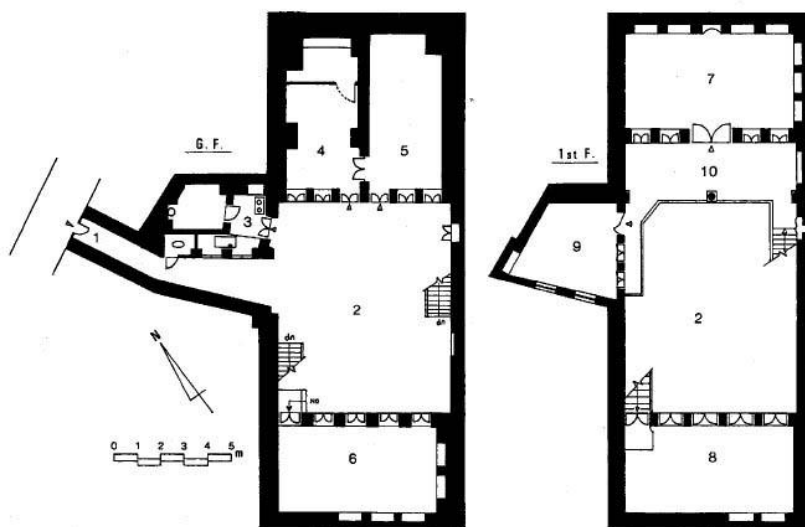
Source: Marcus, A. In: Marcus, A. *The Middle East on the eve of modernity: Aleppo in the eighteenth century.* Columbia: Columbia University Press, 1989, p.280

4.3. Physical and functional characteristics

4.3.1. Building typology

The height of houses ranges between one to two floors in the area of Bab Al Hadid. The houses date back to the early ottoman period. This area is mostly residential except for the informal commercial activities facing the newly constructed street of Qadi Askar.

The courtyard houses are the main typology prevailing the Old City. The household is considered a private sanctuary that is protected from unwelcome observation. The design of the house reflects the concept of the privacy that is followed in the Old City: all the rooms in the house are open to the inside courtyard and the tall blank exterior walls ban all the surveillance from the outside (Marcus, 1989: 294) (Figure 31).



Plan of a traditional house

1: Entrance; 2: Courtyard (patio); 3: Kitchen and shower bath;
4: Dining and washing; 5: Living and bedroom for a boy;
6: Workroom (dressmaking); 7: Main bedroom; 8: Bedroom
for three daughters; 9: Storeroom; 10: Balcony

Figure 31. Map showing the introverted courtyard and the distribution of the house's elements

Source: Nakabayashi, I. *Map of a traditional house*. In: *Urban structure of Islamic city and its modern transformation: a case study of Aleppo, Syria*. Tokyo: Tokyo Metropolitan University, 1989, p.9.

The internal courtyard promotes flexibility in integrating indoor and outdoor activities in the house for the family members. The courtyard houses are adjacent to each other sharing the supporting walls on the sides whereby they create an organic pattern in their forms (Figure 32). These courtyards are used mainly by women during the day as they are considered as an extension of the interior spaces (Vincent, 2004: 19, 22).

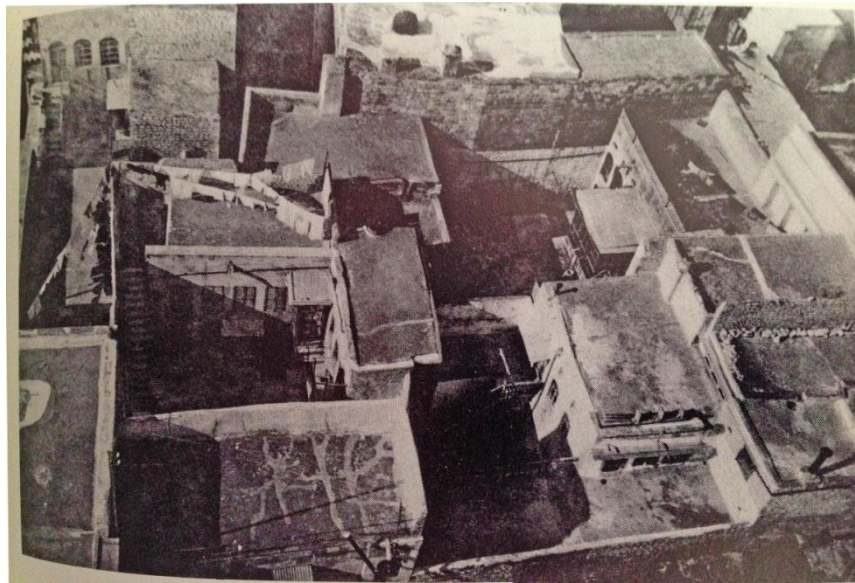


Figure 32. Image showing the shared walls of the traditional

Source: Marcus, A. *The Middle East on the eve of modernity: Aleppo in the eighteenth century*. Colombia: Columbia University Press, 1989, p.177.

The residential clusters are built with respect for the human scale as they do not exceed three floors. All the houses are built of stone and have wooden or vaulted ceilings. The narrow passageways that lead to the houses permit a limited access to the vehicular traffic and they are lined with the high walls of the houses on both sides that are only open with limited narrow windows and the doors of the houses. Inside the house there is an Iwan, a fountain and stone or wooden decoration that reflect the social and the income level (Karazon, 2005: 22) (Figure 33).



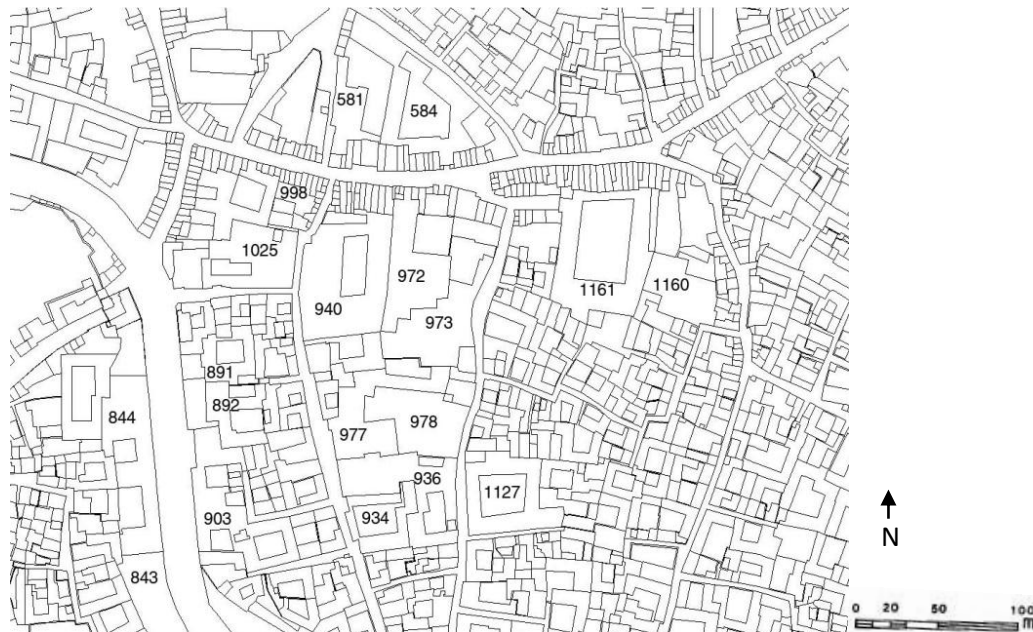
Figure 33. Image showing the Mamo house in Qadi Askar area as the ornaments reflect the social and the income level of the dwellers of this house
Source: (Author, 2014)

4.3.2. Land use

The old city of Aleppo presents mixed land uses. The central souks dominated wholesale retail and performed more specialized functions and services. The residential quarters were not entirely residential; there was a mix of land uses between the residential and the commercial sections. While the residential quarters dominated the narrow streets that end with a dead end, the commercial activities took place in the wider streets. The mixture of land uses provided the residents with their daily needs because of their limited mobility at that time.

Land use transformation was common from residential to commercial or even industrial (Khechen, 2004: 50). Some physical modifications of the house were also common and exhibited in adding some physical structures or rooms to the house. Land use conversion continued one year after another. Similarly, some commercial buildings were turned into new business lines (Marcus, 1989: 292). Likewise, in Bab

Al Hadid area a Khan that was used to store grape syrup was turned into a factory for furniture in the 1960 (Nakabayashi, 1989: 10) (Figure 34).



Usages and ownerships of large-scale buildings in Bab al Hadid	
Site Number ¹⁾	Usages and ownerships — in the past and at present —
581	<i>Khan</i> and shop, were <i>Waqf</i> ²⁾ Public, now are private property.
584	<i>Hammam</i> (Bathroom) and three shops, were <i>Waqf Zarree</i> (Family <i>Waqf</i>), now are private property and divided into many landlords.
998	Seeds store. Part of it was Family <i>Waqf</i> and the other was private property, and now is government property.
1025	Seeds store, was <i>Waqf Zarree</i> , and is now government property since 1956
940	Mosque and shops are <i>Waqf</i> Public (Banqusa Mosque) till now.
972	Two <i>khans</i> and shops. Land was <i>Waqf</i> and building was private property. Now both land and building are private property.
973	<i>Bathroom</i> (<i>Souq El Ghazel</i>) was private property and also now. But the bathroom was demolished and land is empty now.
1160	<i>Khan</i> , in the past and also at present, is private property
1161	<i>Khan</i> in the past and now factory. Land was <i>Waqf</i> and building was private property. Now both land and building is private property.
891	Dwelling house, has been private.
892	Two dwelling houses, has been private.
977	<i>Khan</i> . Land has been <i>Waqf</i> and building has been private property.
978	Shops, has been <i>Waqf</i> .
934	Dwelling house, Was <i>Ehhlassee Mosque Waqf</i> and now is properties for many persons.
936	Two dwelling houses, were <i>Ehhlassee Mosque Waqf</i> and now are government property.
1127	Dwelling house, has been private property.
843	<i>Khan</i> , has been private property.

Figure 34. Shows the transformation of properties in the area of Bab Al Hadid from private to *Waqf* and vice versa

Source: Nakabayashi, I. *Usages and ownerships of large scale buildings in Bab al Hadid.* In: *Urban structure of Islamic city and its modern transformation: a case study of Aleppo, Syria.* Tokyo: Tokyo Metropolitan University, 1989, p.11.

The study of the land uses done by Gaube and Wirth in 1984 shows a light alteration of landuses in the 19th century and the 20th century. Their study shows a high level of industrial zones in the area of Qadi askar. Many of these industries are related to

cereals such as cereal market, mills and bakeries. In addition, Khans and souks had spread alongside the main axes (Terao, 1995: 81) (Figure 35).

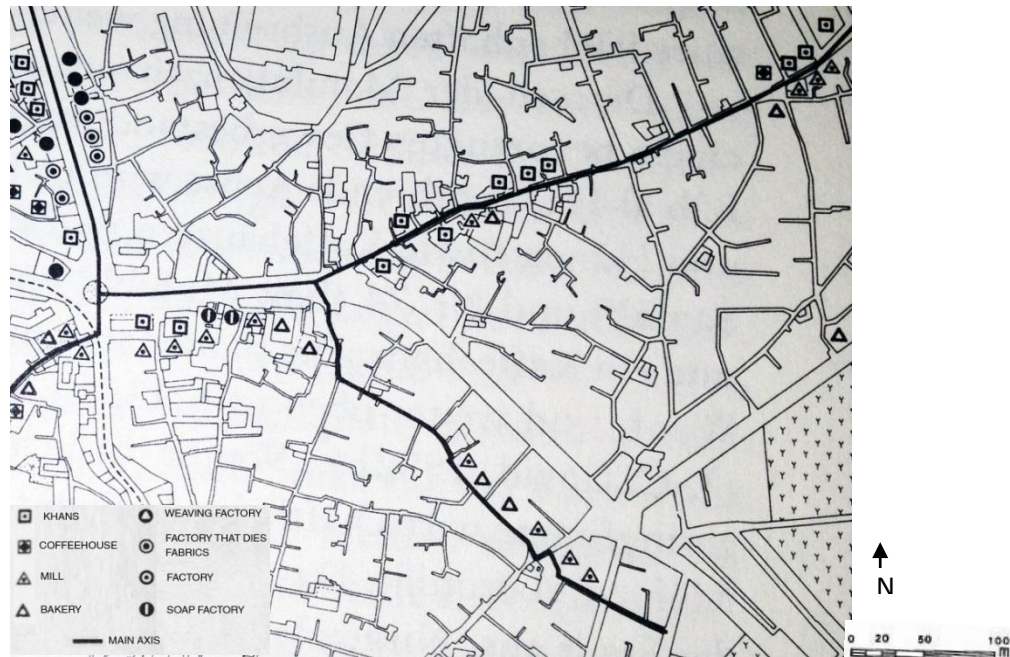


Figure 35. Map showing the commercial activities on the main axes while the narrow streets are restricted to residential uses

Source: Gaube, H., & Wirth, E. In: Gaube, H., & Wirth, E. *Aleppo: historische und geographische Beiträge zur baulichen Gestaltung, zur sozialen Organisation und zur wirtschaftlichen Dynamik einer vorderasiatischen Fernhandelsmetropole* (Vol. 58). Wiesbaden : L. Reichert, 1984, p.207.

The study of the German Agency for Technical Cooperation (GTZ) shows the dominance of the residential properties in Bab Al Hadid area where the commercial functions are located on the main constructed street along with the factories, which occupy large parcels (Figure 36).

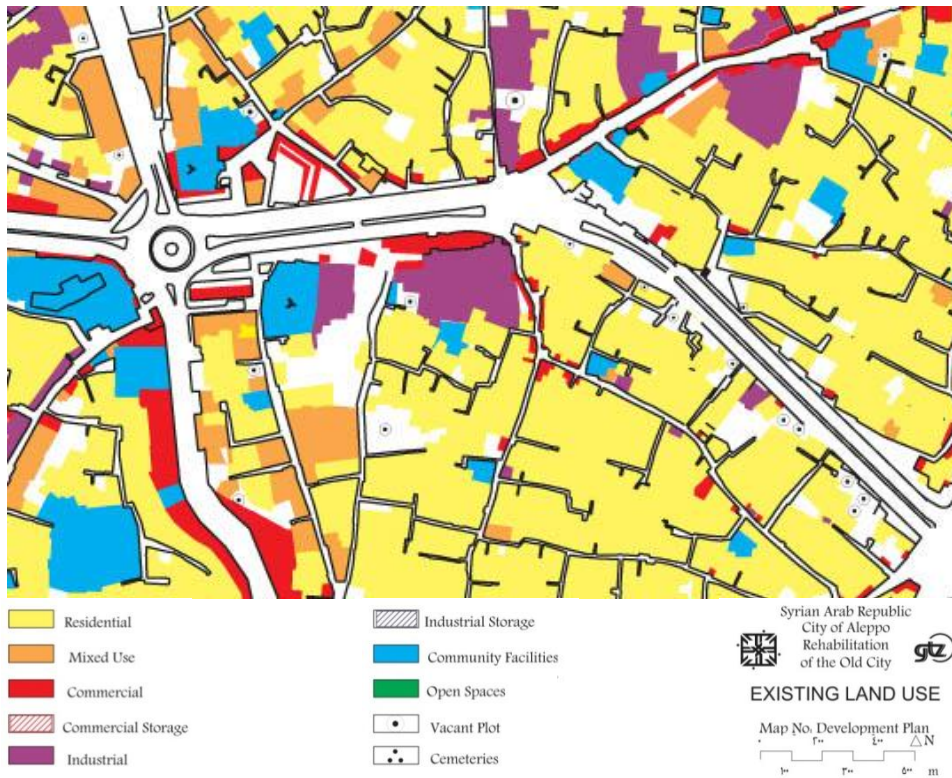


Figure 36. Shows land use study by the GTZ

Source: Rehabilitation of the Old City of Aleppo Development Plan, Existing Land Use. GTZ

4.3.3. Street hierarchy

Jean Sauvaguet (1941), who analysed the city from an architectural and urban planning perspective, defined two types of streets in the Old City: the regular grid of the economic center (Medina), and the irregular streets of the residential quarters (Khechen, 2004: 46). The pedestrian network consists of a hierarchical system leading from the more public to the more private. The public domain (the market, the mosque, and the hammam) is connected to the private domain (residential clusters) via branches. These branches split gradually from main streets to secondary streets until they reach the dead end streets (cul-de-sacs) where the residential areas are located. The narrow streets are 2-3 meters wide (Bianca, 1980: 14). The narrow streets cover

more than 50% of the street network. They are restricted to residential traffic, unlike the main streets that accommodate various activities and thus are visited by different groups of users (Khechen, 2004: 42) (figure 37).



Figure 37. Image showing the semi-private space of the narrow streets that lead to the house

Source: Nouredin Hassan, 2012

4.3.4. Open spaces

The typologies of open spaces in the historic Arab cities do not reveal the same typologies of open spaces in European cities. For instance, historic Arab cities do not have spaces like the Greek Agora: the medieval town of the Medina replaced the Agora and built on its ruins.

Each neighborhood comprises some clusters with separation between public and private. Most of the buildings are gated and walled: the city, the souks, the residential quarters and the public and the private properties. The main urban patterns in the city concentrated on a multifunctional structure where the mosques were interconnected with the different layers of souks. The souks are interrupted by hammams (baths),

madrassah (schools) and khans (caravanceries), which were all connected to the mosque. These amenities with the street constitute the public space in the traditional city.

The residential quarters constitute of different harat (residential neighborhood). The harat have their own circulation system, which consists of the branches of the connected narrow streets; these are considered as open public spaces. However, the paths leading to the houses are considered semi-public spaces which ends with cul-de-sacs and are limited to the residents of the houses (Figure 47). The private open spaces are the introverted spaces of the courtyards of the houses.

CHAPTER 5

LITERATURE REVIEW

5.1. General introduction

Urban form can be understood through time in order to understand the continuous urban transformation and replacement. It not only reveals the development of the city through time, but also reveals the socio-economic conditions (Moudon, 1997: 7). The study investigates the elements of integral urbanism in the context of the Old City of Aleppo as a means to understand and analyze the city through its layers. The twentieth century urbanization focused on the object (the building) rather than the fabric (the public) which caused breaks in the urban block system in the city (Carmona, 2010: 68). The paradigm of integral urbanism reveals the effects of Modernist planning in an area in the Old City of Aleppo where the boulevard of Quadi Askar cut through the old urban fabric. The study will analyze the site chronologically by investigating the elements of integral urbanism through the periods from before constructing the boulevard, after its construction, till the current war.

Streets have the spinal role that forms the backbone of settlements. However, modernism “stripped the spine and ribs out from the urban flesh, and set up the road as a separate system” (Marshal, 2004: 6). In order to apply the modernists’ conception about opening streets in the Old City, many buildings were destroyed as a result of this work. Interestingly, the destruction that was caused because of the modernists’ efforts in freeing the ground for the vehicular movement is similar to the destruction of buildings and facades caused by war: “. . . Much planned urban change itself involves war-like levels of violence, destabilization, rupture, forced expulsion, and place annihilation” (Graham, 2004: 33). Consequently, analyzing the site through

layers of urban growth, urban planning, and the current war will reveal the transformations of each phase by investigating the elements of integral urbanism, and thus, enable us urban designers to propose urban design guidelines and strategies that can fix the harm caused by the modern planning and to use it as a model that can be replicated for a post war reconstruction. In the analysis that follows, the conditions caused by the implementation of the boulevard show similarities to the resulted conditions caused by the war.

5.2. Introduction to Integral Urbanism

Integral urbanism aims to “heal wounds inflicted upon the landscape by the modern and postmodern eras” (Ellin, 2006: 1). Its elements of integration provide designs that are flexible to the movement of space (circulation) and time (dynamism). The elements emphasize on process for their implementation rather than producing final products. The paradigm of integral urbanism focuses on flow so as to facilitate “movements of people, goods and information” (Ellin, 2006: 6) and focuses on getting away from master planning that generates fragmented cities lacking a clear character and soul. It shifts from a top down approach and a final outcome, and instead proposes interventions that are produced by people and inspired from social and historical contexts (Ellin, 2006: 10). It works on punctual interventions that contribute to enhancing the flow by creating connections and treatments for the abandoned spaces like “in-between” spaces or “no-man’s lands” (Ellin, 2006: 9). Integral urbanism is a reaction to Modernism; while Modernism considers space as objective, homogenous and neutral, integral urbanism “celebrates subjectivity, heterogeneity, and meaning” (Ellin, 2006: 136). It activates places and creates places

of intensity that allow for diversity of uses and users. Its elements allow for the empowerment of people which creates opportunities for them to come together and propose alternatives. Consequently it enables efficiency and collaboration among people.

5.3. Explaining the elements of integral urbanism

5.3.1. Hybridity

Favoring vehicular movements over the pedestrian experience during the modern period produced the separation of functions: land uses, activities, buildings, and districts. This dispersal and fragmentation of the built landscape put limit to connectedness, walkability and sense of place of the “prevehicular landscape” (Ellin, 2006: 18).

Ellin (2006) argues that “Hybridization connects people and activities at points of intensity and along thresholds” (18). The urbanist Roger Trancik calls for the mix of uses as it allows richness and vitality on cities which enables people to interact and converge in ways instead of the separation in functions that does not allow this interaction (Ellin, 2006: 20). While Modernist paradigm weakened convergence and focused on separation and control, the new paradigm of integral urbanism supports convergence, combining and linking (Ellin, 2006: 18). Creating a program of hybridity can increase the density of activities without increasing the density of buildings or it can increase some buildings on some parts in order to produce a low density on the urban level (Ellin, 2006: 23). The result of this mix of the dense activities produces new hybrid typologies and morphologies that can serve and

combine all the users. It aims to revitalize the public realm as it creates new gathering spaces. It helps to reduce commuting, increase the public spaces and thus increase the opportunities of public encounters. Integral urbanism encourages convergence of time and space (activities and people) which generates new hybrids and these hybrids progress to produce other new hybrids which will lead to progressive development.

5.3.2. Connectivity

Connectivity is a principal notion for urban design interventions. Designers create “flexible and multifunctional surfaces” in order to connect the urban tissue constituted of the fragmented spaces and allow for the diversity of uses and users (Ellin, 2006: 44). Connecting people and places can be achieved through the creation of pathways. Constructing the boulevard of Quadi Askar to allow for the car movement in the Old City of Aleppo was an “inspiring separation when the separation of functions was the goal” (Ellin, 2006: 49). However, the functions are brought into a mix in the postmodern period which can generate new urban forms and experiences (Ellin, 2006: 49). A “connected urbanism” investigated the existing networks as pivotal points and a basis of inspiration which is the opposite of what the modernism planning considered that they should be neglected or eliminated. Integral urbanism encourages flows and seeks to let them grow; when preserving and enhancing the network, it allows for the flow that brings people together and thus preserves culture, diversity, place, and time (Ellin, 2006: 50). For the parts of the city that need revitalization, the imposition of an urban growth boundary can act as a noose that shrinks the city’s growth and acts as a negative reinforcement of the area. Instead, positive implementation can be achieved by enhancing the existing network when proposing

attractors to the area. Enhancing the network can include multifunctional activities such as housing, workspaces, retail shops and restaurants. Consequently, instead of constituting an undesired neglected zone “this positive reinforcement” will establish a more inviting hub that is not bounded by growth (Ellin, 2006: 50).

5.3.3. Porosity

Porosity is achieved in urban conditions that allow for “seepage but not free flow” (Ellin, 2006: 62). Ellin states that “Functional porosity allows access to a place or modulates our relationship with it” and it also defines the public and the private domain (Ellin, 2006: 70). In design this can be achieved through “permeable building edges” such as arcades and outdoor seating. “Historic porosity” aims to preserve “the remnants of the past while building new” (Ellin, 2006: 70). It aims to preserve the historic character while proposing new solutions that adapts to the changing of needs. “Urban porosity” presents spatial porosity that can be achieved when “permeable membranes” link and separate buildings from the surrounding physical and cultural landscape (Ellin, 2006: 77). Gateways in cities present porosity that attracts attention to simultaneously moving from one side to another highlighting the linkages and the boundaries of the area with its adjacent areas (Ellin, 2006: 79). The notion of porosity combines exposure and concealment, and represents the city in a more accessible and lively manner. This porosity accepts the combination of old and new, public and private, exterior and interior; integral urbanism does not stop within the limits of lines. “Translucent urbanism” does not eliminate borders and edges like the Modernist attempts, nor fortify the edges like in the postmodern period, but rather it engages

them to reintegrate and thus does not eliminate differences as “nothing exists in isolation only in relation” (Ellin, 2006: 83).

5.3.4. Authenticity

Authenticity evolves and grows in a way that answers new needs in a “self-adjusting feedback” that determines and observes success or failure. When people negotiate and discuss to implement their proposals to improve the city through parks, educational opportunities, and development, the authenticity can be reflected in this implementation (Ellin, 2006: 103). Rather than criticizing the social and economic disparities that are manifested in the landscape, integral Urbanism allows for spontaneous manifestations that express popular culture and respect urban tradition while understanding the local culture through listening and interaction. It does not refute unpleasant social and urban conditions to move towards formalism and fantasy, but rather “it engages contemporary realities by honoring the local community and landscape as the greatest source of inspiration” and not considering them as obstacles to overcome. It is susceptible to site and situation (local, political, economic, social, physical, cultural and historic contexts) as it is receptive to fluctuating conditions and reaction in a way that allows for application (Ellin, 2006: 105). A real authentic city is a city that is subject to ongoing “meaningful connections” that transform isolation to integration between the city and its people and between people. Authenticity reflects the interconnectedness between the community of people and the places. For a post war intervention, applying this concept will not be to copy older buildings and cities, but to work on the recovery that presents the “urban instinct”, a means to

establish connectedness through design and other means that aim to integrate the city and its residents (Ellin, 2006: 114).

5.3.5. Vulnerability

Integral urbanism aims to abandon control and to enable vulnerability that illustrates “the shift from inclusive master plan to a more project oriented, incremental, catalytic, and tentacular form of intervention” (Ellin, 2006: 121). Vulnerable urbanism allows things to happen even the unexpected and liberates them from “the repressive and hierarchal modern city”. If these changes were applied to the built environment, the interventions will have a “domino effect” that will catalyze other transformations. Vulnerability describes the nature of integral urbanism. A vulnerable urbanism is dynamic and not complete when compared to modernist tendency to completeness, utopia, and setting and designing all (Ellin, 2006: 122). This concept accepts changes rather than fixed products as it accepts the imperfect. Since the old traditional city did not follow any zoning but rather its composition followed some rules related to air, light, accessibility and privacy, vulnerable urbanism does not allow for “ultracontrolled master plan” nor allows the market to dominate, but instead it allows for variations within the large entity (Ellin, 2006: 127). Vulnerable urbanism does not favor a tabula rasa approach that aims at imposing concepts, but it focuses on the process that leads to system, patterns, and connections. Vulnerability does not signify weakness and indifference but rather it aims to relinquish control and accept the existing elements in the city. It aims to enhance receptivity towards sites and culture that can lead to inspiration and opportunities rather than constraints and control (Ellin, 2006: 132).

The table below shows the key points of the integral urbanism elements and their gradual degradation in the periods before and after the construction of the boulevard, and during the war.

Integral urbanism elements	Key points	Before constructing the boulevard	After constructing the boulevard	The current war
Hybridity	“Hybridization connects people at points of intensity”	+++	++	+
Connectivity	Connect the urban tissue constituted of fragmented spaces	+++	++	+
Porosity	Porosity allows for seepage but not free flow	+++	++	+
Authenticity	Authenticity transforms the city from isolation to integration	+++	++	+
Vulnerability	Vulnerability accepts the existing elements and encourages project oriented intervention	+++	++	+

Table 1. Table showing the key points of the integral urbanism concept and their gradual degradation in the periods before and after the construction of the boulevard, and during the war.

5.4. The study area in the period before the construction of the boulevard

5.4.1 Hybridity

Taking the conditions of land uses of the Old City before the war and specifically the Quadi Askar Boulevard in 1970s, enables us to comprehend the functional characteristics that present the area. Through the previous historical analysis mentioned in the previous chapter, it can be deduced that the area was a hybrid zone constituted of mixity between residential and commercial activities like most of the parts of the Old City. However, the caravansary road linking it to the east reassured its importance in the past to carry this commercial significance through time making from Bab al Hadid area a commercial hub full of activities until the construction of the boulevard that altered the area’s hybrid commercial and residential character. Analyzing the hybridity paradigm brought by Ellin will enable me to understand the

transformation of land uses of the area on both sides of the boulevard in order to propose design guidelines and new land uses that can offer diversity of uses for the locals and the nonlocals.

Land use analysis

Based on the historical analysis in chapter two, it can be inferred that before the construction of the boulevard, the area of Quadi Askar formed an interweaved tissue constituted of socio spatial practices of daily life (Figure 38).

- The residential clusters mostly dominated the moderately small lots where the secondary streets are branched from the main streets.
- The other public amenities such as (mosques, khans, hammams, and commercial nucleus) dominated large lots on the main roads. The sizes of the mosques and khans are the largest if compared to the residential and the commercial nucleus of the area. The commercial lots constituted of shops and retails are proximately small in size and are distributed along the way from Bab Al Hadid on the border of the walled city to the adjacent periphery outside the city walls eastward.

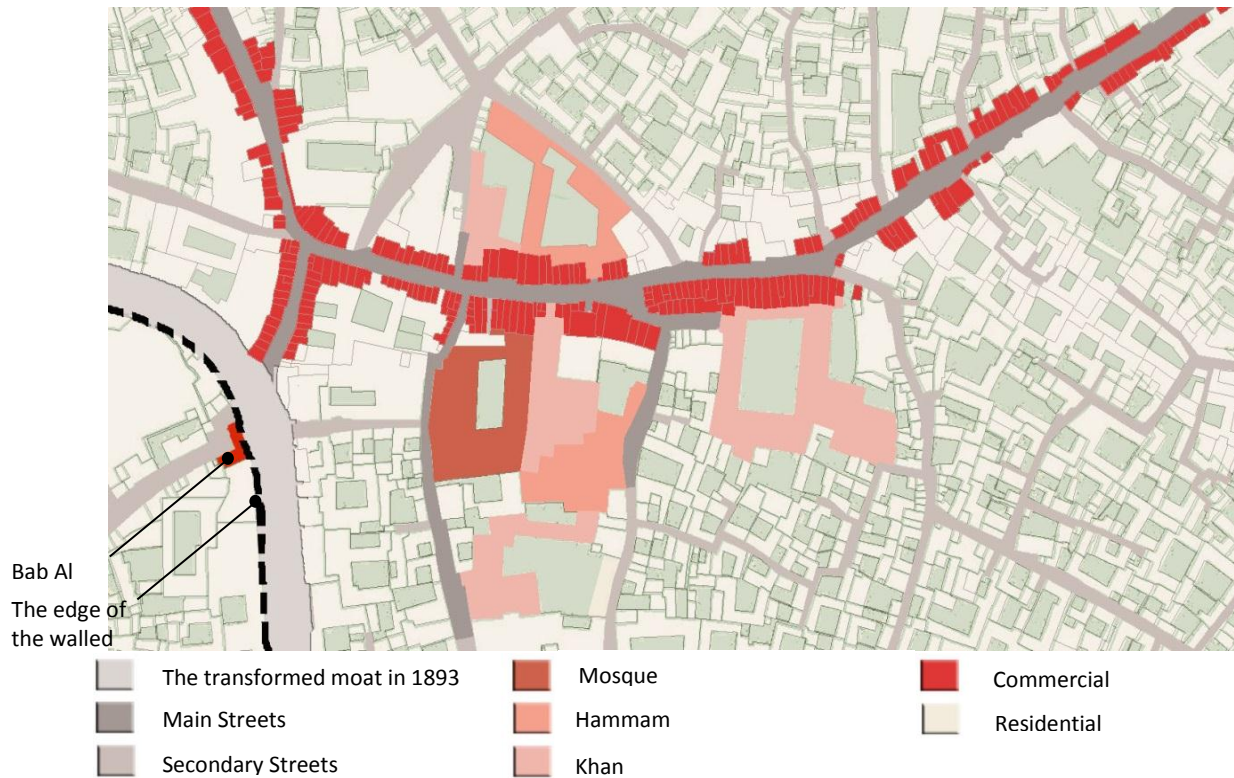


Figure 38. Map showing the distribution of activities on the peripheries of Bab Al Hadid

Source: (Author, 2014)

Typology of open spaces

The open spaces are constituted of streets and internal courtyards ranging from the public to semi-public to private. The wider the street is the more access to it from a variety of users. Consequently, the narrower the street is the more limited access to it since it is confined to the residents of the quarter who occupy the dwellings. It is interesting to note that the sizes of open spaces vary depending on the size of the lot and also the function of the building. The mosques, khans and hammams have large open semi-public spaces. They are usually larger than the ones of the private houses (figure 39).



Figure 39. Map showing the types of open spaces on the peripheries of Bab Al Hadid

Source: (Author, 2014)

It can be understood from this analysis of the period of the pre-construction of the boulevard that the functions of the buildings and the open spaces were working as a cohesive system providing all the services to all the users of the area. The distribution of the different functions of the Old City allowed this intermixture between locals and nonlocals such as traders coming from abroad. These services that have spread horizontally depending on the pedestrian circulation and the carriage movement allowed for more interaction among the different users. The location of the services on the street level imposed a direct relationship between the users and the exposed services on the street level. Consequently, the concept of hybridity is illustrated through the juxtaposition of the amenities and the users that allowed for a harmonious relationship that facilitated interaction and helped in acquiring a collective decision making in order to adapt to the needs, thus affecting the landscape of the city.

5.4.2. Connectivity

The relation between the city and its periphery

The connection between the city and its periphery was historically always an interchange relation focusing on the commercial trades of the caravans. The large main streets of the city were the primary tracks for the traders allowing the circulation from and to the walled city. The commercial spine of Bab Al Hadid was the main connector of the traders travelling to the east of the medina where the focal commercial hub of the city existed. This road contained all the public amenities along its sides like mosques, khans, and hamams to serve the residents of the area and also the overseas traders coming from outside the city. It was a spine that worked on the national and international level in serving the commercial needs of the users (Figure

40)

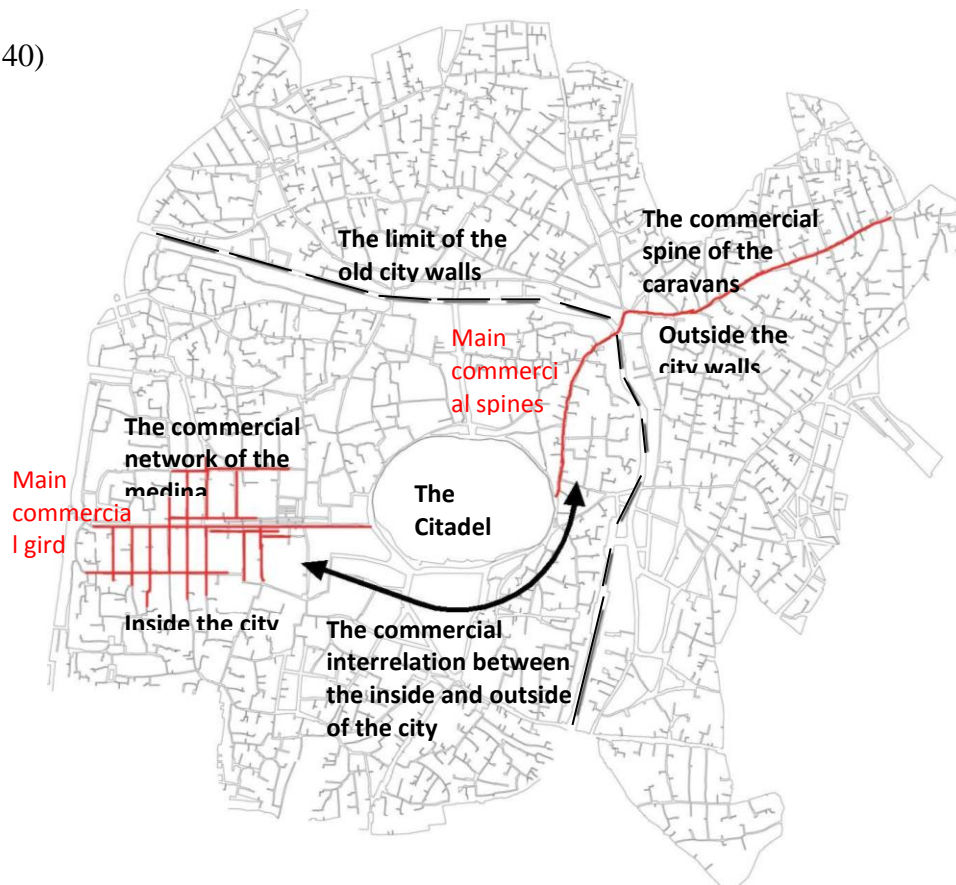


Figure 40. Map showing the trade relation between the inside of the walled city and the outside on the peripheries of Bab Al Hadid

Source: (Author, 2014)

The connectivity on the periphery (the boulevard area)

The hierarchical route system of the Old City depends on the level of public / private uses. The public streets that contain the commercial activities are larger in width, whereas the streets leading to the residential quarters become narrower till they reach the door of the houses forming a dead end street (cul-de-sac). While the narrow streets form a pedestrian friendly environment for the inhabitants, the wide streets used to be the main roads for carriages as well as pedestrians (Figure 41). The public amenities form a median between the residential clusters and the main streets, therefore, the relation between the dead end streets and the main street is an indirect relation that protects the privacy of the residences (Figure 42).

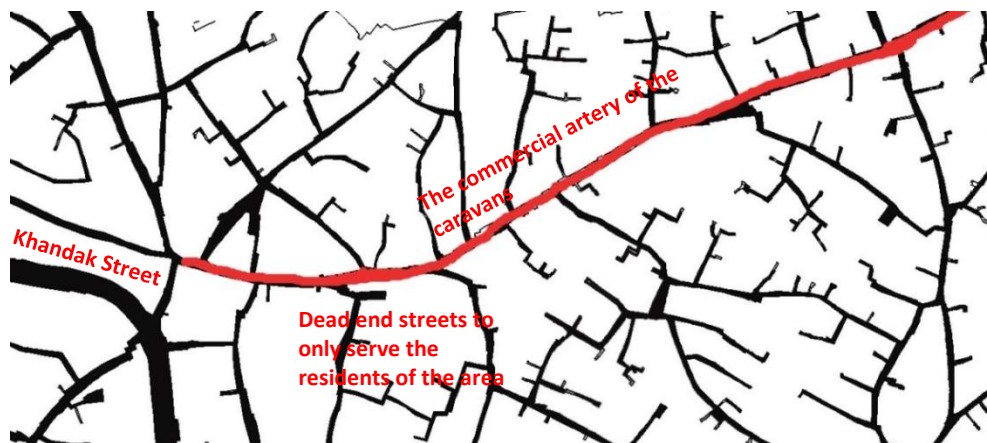


Figure 41. Map showing the distribution of the streets outside the walled city on the peripheries of Bab Al Hadid depending on the level of privacy

Source: (Author, 2014)

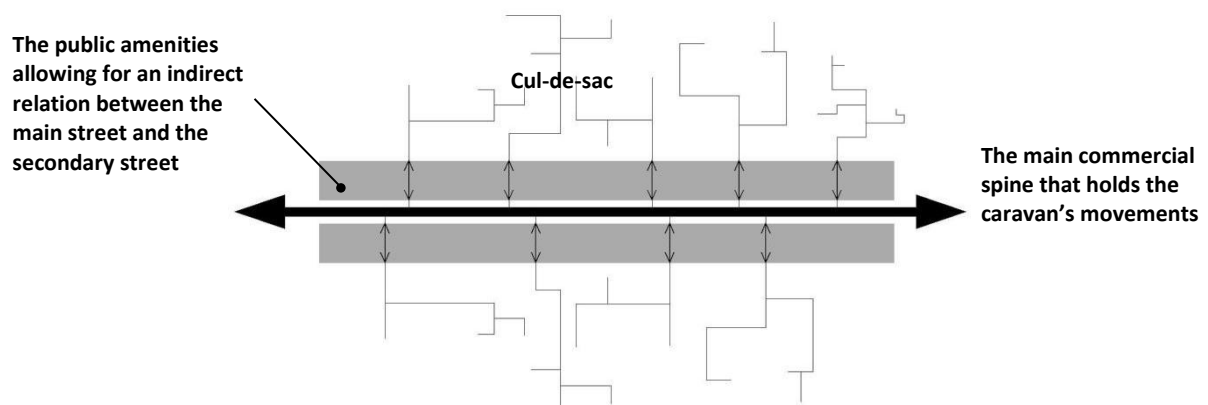


Figure 42. The distribution of the public amenities adjacent to the main streets allowing the indirect relation to the residential clusters

Source: (Author, 2014)

5.4.3. Porosity

The porosity of the walled city

The walled city's relation to its peripheries has happened through its gates. The gates worked as a filter to monitor the movements of the caravans, traders and visitors from the inside to the outside and also from the outside to the inside of the walled city. Thus, the walls of the city worked as "permeable membrane" through its gates. This porosity was achieved on specific nodes, but not on the whole edge of the walls. It was based on monitored nodes allowing a translucent relationship between the walled city and the immediate surroundings (Figure 43).

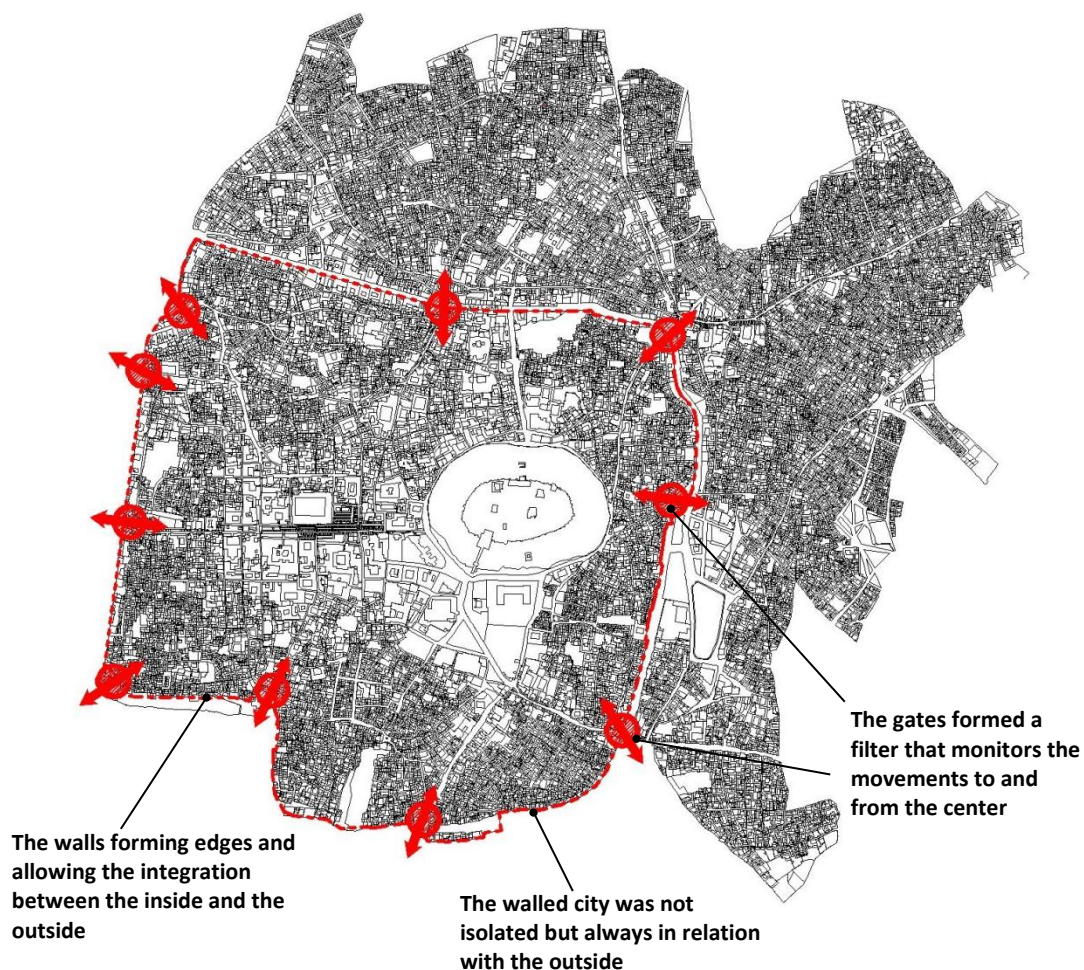


Figure 43. Map showing the gates' relation to the city as porous points that monitor the movements of the caravansaries

Source: (Author, 2014). A sketch over base map of the city prepared by (GTZ)

The porosity of the periphery

On the district level, Bab Al Hadid works as a filter for the trade movement coming from and to the city. It also works as a distributing point that allows the spread of the commercial shops outside the walls. On the neighborhood level, the commercial shops form a porous membrane that is working as a translucent element that protects the privacy of the residential clusters behind (Figure 44). The edge of the commercial shops works as porous membrane allowing the interrelation between the main commercial street and the residential clusters behind. This porous relationship is evidently happening through the layers of the main street, the commercial shops and the residential clusters. It is also happening between the residential clusters (Figure 45).

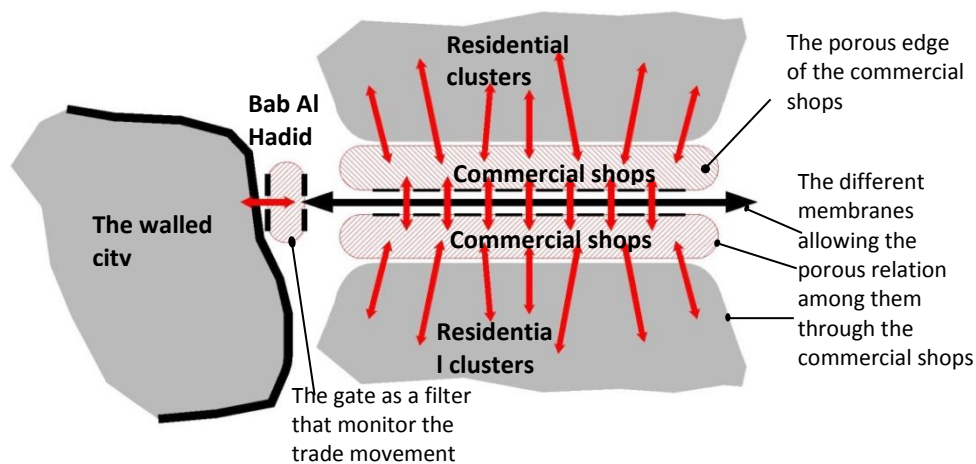


Figure 44. Shows the porous relationship on the neighborhood level between the commercial shops and the residential clusters

Source: (Author, 2014)

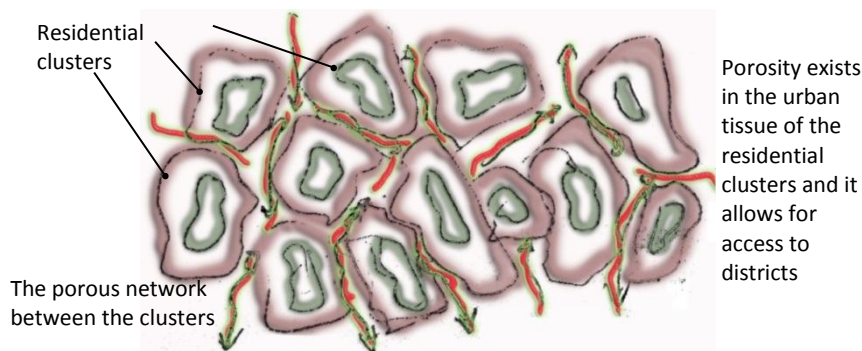


Figure 45. Shows the porous relationship on the neighborhood level between the residential clusters

Source: (Author, 2014)

5.4.4 Authenticity

Authenticity of the walled city

The city expanded spontaneously from the Hellenistic period until today. It expanded through layers allowing each period to have its remnants and boundaries on top of the previous layer. This growth happened because of the impulsive growth of the city, its growing trades, and its population increases. The dwellers allowed for the interaction among themselves and also between themselves and other immigrants and traders. Authenticity can be understood through urban growth that went beyond the socio economic disparities as the city allowed the communication of urban culture to spread which in turn contributed in expanding the city's boundaries and permitted to preserve its authenticity through time. The expansion was not only an urban growth of physical structures, but also of flourishing trades that contributed in increasing relations throughout the city's urban network (Figure 46, 47).

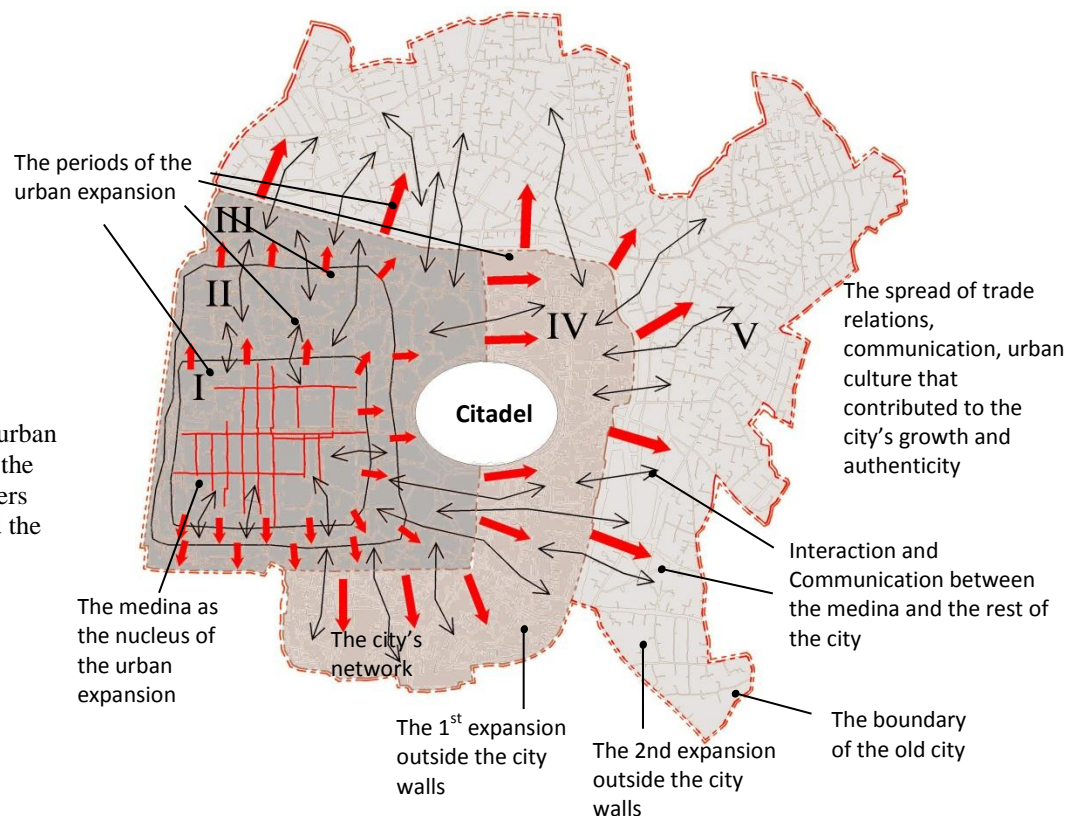


Figure 46. Map showing the urban expansion of the city through the interaction between the dwellers and the traders which allowed the city's authentic growth

Source: (Author, 2014)



Figure 47. Image showing the souks in the medina that shows the relation between people and places
Source: retrieved 2014 from <https://www.flickr.com/photos/friendfaraway/2428640702/in/photost>

Authenticity of the periphery

The relation between the commercial spine of Bab Al Hadid outside the city walls and the medina was a product of an urban and commercial growth. It contributed to establishing the commercial route heading to the east of the walls. This growth was susceptible to the local and economic changes which allowed this connection of the center to the peri-center. Consequently, it created a “meaningful connection” that broke the isolation of the walled city and contributed to the authenticity of the city that reflected the connectedness between people and places (Figure 48).

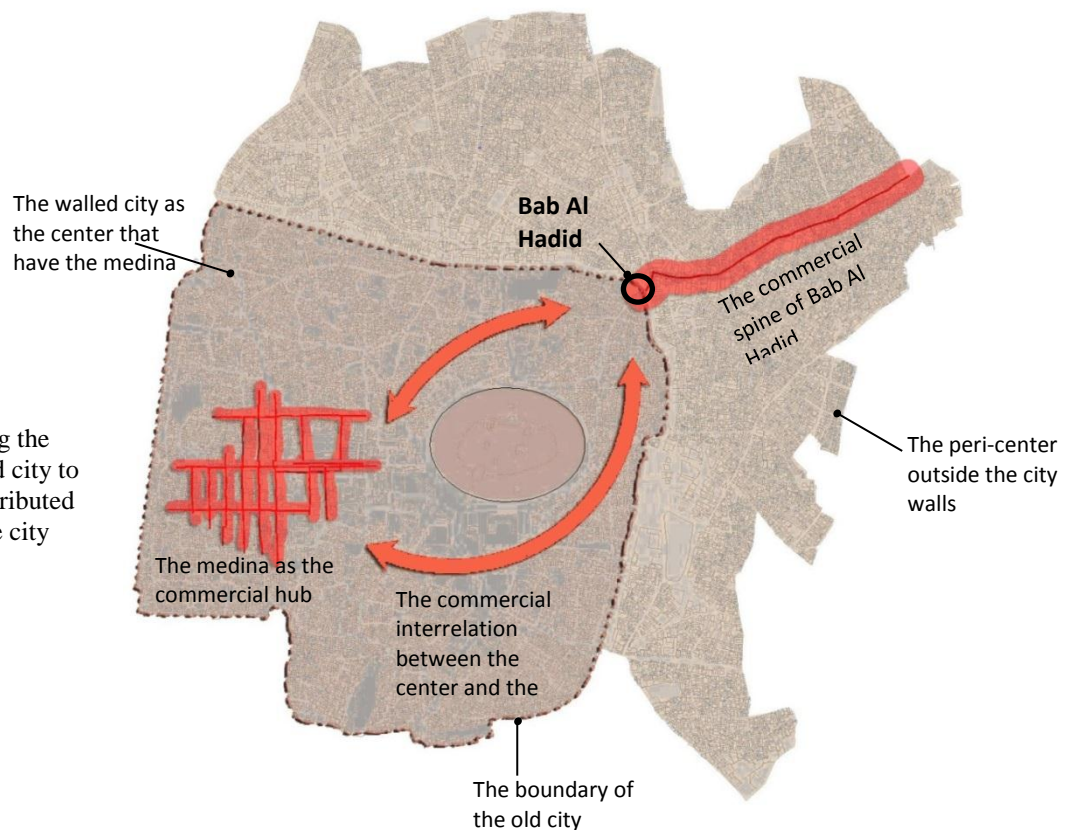


Figure 48. Map showing the connection of the walled city to the peripheries that contributed to the authenticity of the city

Source: (Author, 2014)

5.4.5. Vulnerability

The urban sprawl of the Old City did not follow any special zoning, but rather it followed the rules of the Old City that organize the private and the public. The streets were considered as public amenities and were branched from the more public to the least public streets until they became narrower and reached the door of the house. Accordingly, the city's urban form is an organic urban form constituted of the voids: the streets, and the internal courtyards, and the mass: the buildings. While the internal courtyards of the houses are restricted to the residents of the house, the internal courtyards of the khans, the hammams, and the mosques are open to public use. Consequently, the rules that are contributing to shaping the urban form depend heavily on the private and the public uses concerning the width of the streets leading to them, the internal courtyards, and the façades opening to the streets (windows, and doors). Much of the way the urban fabric is structured depends on continuous negotiations among neighbors, this enabled continuous opportunities for undetermined factors to affect the shape of the built environment.

5.5. The study area in the period after the construction of the boulevard

After the construction of the boulevard, however, the dynamism that once distinguished the area through its interweaved urban tissue wasn't able to function. The boulevard was constructed to link the east side of the traditional city to its west side. However, this imposed structure on top of the inner city caused physical destruction and functional separation that will be analyzed through the elements of integral urbanism.

5.5.1. Hybridity

The commercial hub that once existed on the caravansary road faded gradually till it almost disappeared. As a citizen in the city and through my own pedestrian experience walking along Khandak Street towards the boulevard, the commercial activity stops on the limit of Bab Al Hadid and doesn't continue on the boulevard.

The construction of the boulevard was followed by a proposal for a development plan on both of its sides. However, the adjacent parts of the boulevard were not followed by any type of development, and are yet awaiting for new plans to be executed. The proposed plan was to build high-rise buildings on both sides; a typology completely anomalous to the urban tissue of the traditional city (Figure 49). The proposed land uses were to include a gallery of retail shops on the ground floor and residential units on the upper floors. Since this proposal was not achieved, the introduction of the boulevard left the site with undefined land uses on the ground level. It produced damaged facades and caused internal open spaces of the houses to be open to the street. While waiting for development, the affected facades and buildings were left

without any efforts for rebuilding. Therefore, the facades were treated with some works of refurbishment and the internal exposed courtyards were covered with cinder block fences.

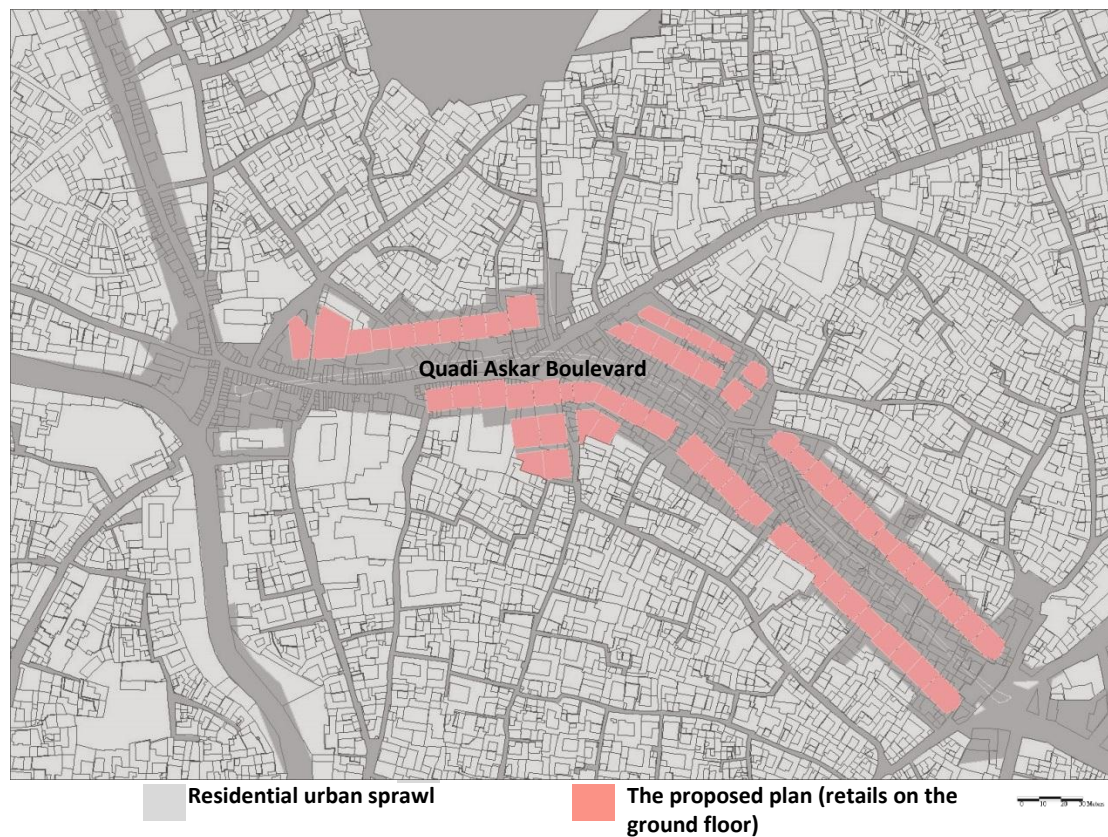


Figure 49. Map showing the proposed land use plan in 1978 after the construction of the boulevard
Source: (Author, 2014)

From the analysis of the map provided by the GTZ, the land uses distribution along Quadi Askar Boulevard and Khandak Street can be understood. Moreover, the land use across the linearity of the boulevard and along the transversal detachment of its sides shows this interrelation of land uses after the construction of the boulevard.

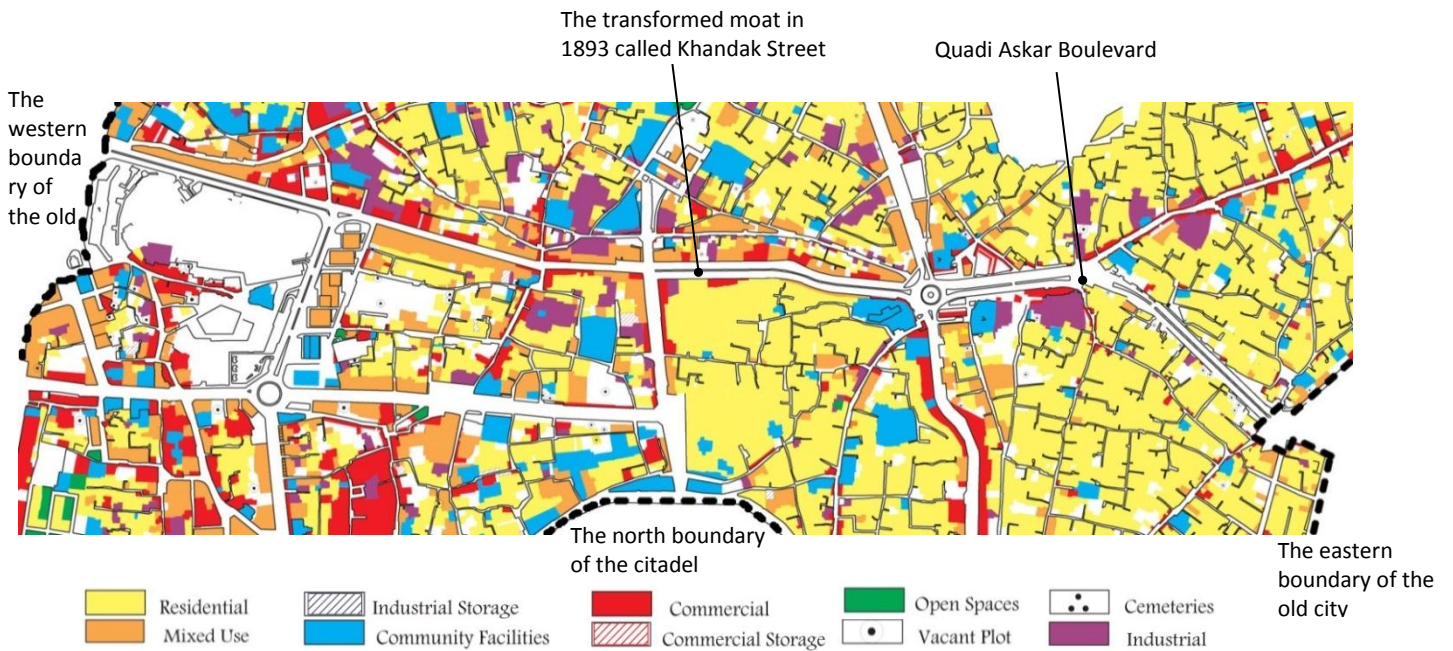


Figure 50. Map showing the land use along the boulevard and the Khandak Street

Source: Rehabilitation of the Old City of Aleppo Development Plan, Existing Land Use. GTZ

The land use along the vehicular line from Quadi Askar Boulevard to Khandak Street is different in its functional distribution. While the newly constructed boulevard of Quadi Askar is dominated by residential uses, the Khandak Street is occupied by commercial and mixed uses (Figure 50). The character of the buildings along the boulevard is residential showing some destroyed buildings and others cut in half. The boulevard cut the urban tissue of the residential buildings creating two neighborhoods out of what had been one neighborhood where residents used to depend on the public amenities of the khan, the bath, and the mosques.

The construction of the boulevard was not followed by any type of urban intervention, and thus it created a functional and legislative break. While in its western stretch the boulevard exhibits physical continuity with the historical right of way, in the eastern stretch it diverts from the horizontal axis linking the east to the west. Land uses were not maintained across its linearity. By observing the plan above (Figure 50) one can detect the break in commercial land uses and activities between the boulevard which is empty and isolated from Khandak Street where a hybrid mix of land use exists allowing people to interact and converge (Figure 51).

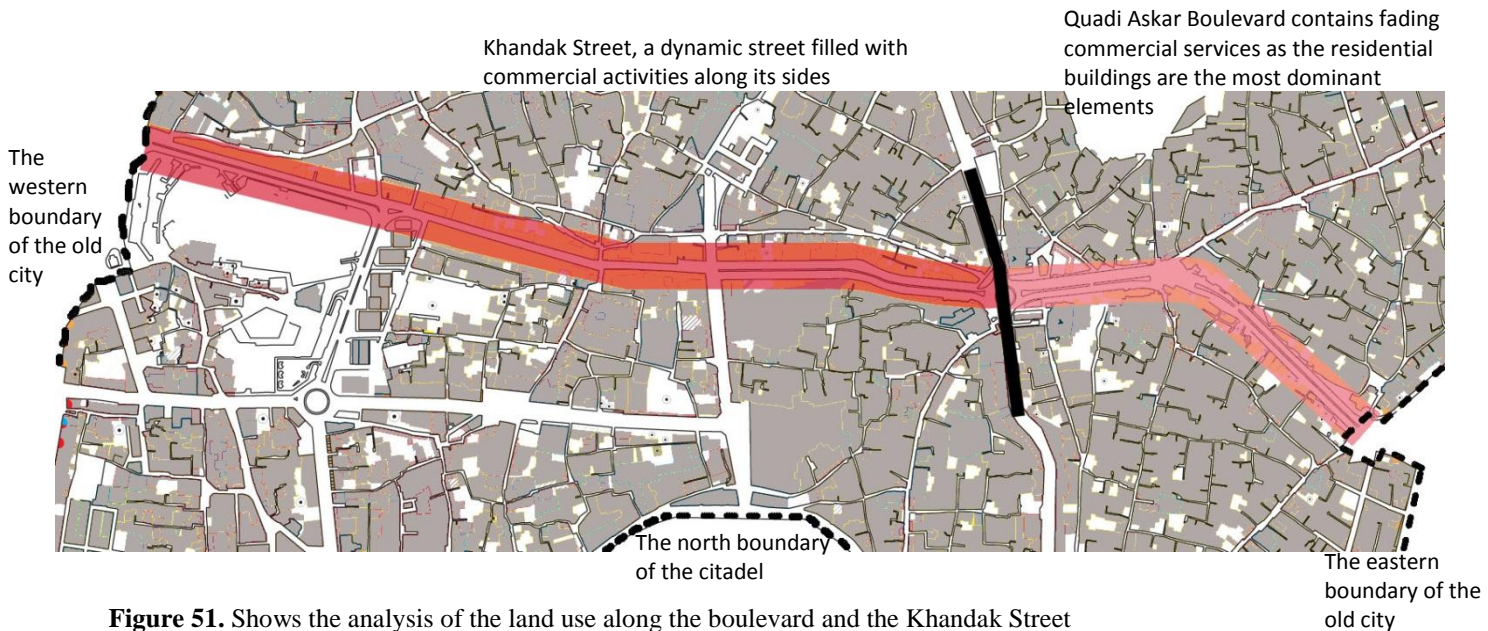


Figure 51. Shows the analysis of the land use along the boulevard and the Khandak Street

Source: (Author, 2014)

5.5.2. Connectivity

The construction of the boulevard of Quadi Askar on top of the urban fabric in 1978 echoed the Modernists' planning in other parts of the city. This project was a continuity of the previous proposed plans by Banshoya in 1970. Both plans have had serious effects on the Old City causing destruction of many monuments.

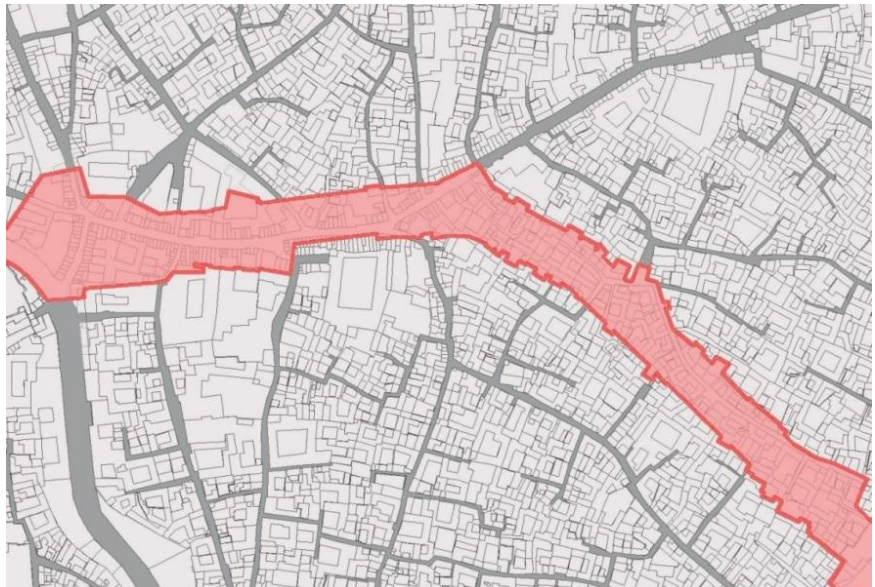
The construction of the boulevard also caused the destruction of many buildings. It affected the morphology of the urban fabric and produced new building typologies. It produced different affected types of buildings and open spaces: historical monument facades were brought down, residual spaces were left un-defined, artificial facades were created, street walls were left hanging and un-connected, and the rights of way defining the social connectivity between the two parts of the neighborhood were cut.

Street morphology

The construction of the boulevard introduced an anomalous urban element in the heart of the neighborhood (Figure 52). It acts as a break of the street network of the neighborhood (Figure 53). It functions to serve traffic on a regional scale instead of the previous network that used to function on a neighborhood scale. The network is diminished and the boulevard only works for vehicular traffic. It caused one neighborhood to be bisected into two neighborhoods segregated from each other by the boulevard.

Figure 52. Map showing the boulevard as an anomalous urban element in its context

Source: (Author, 2014)







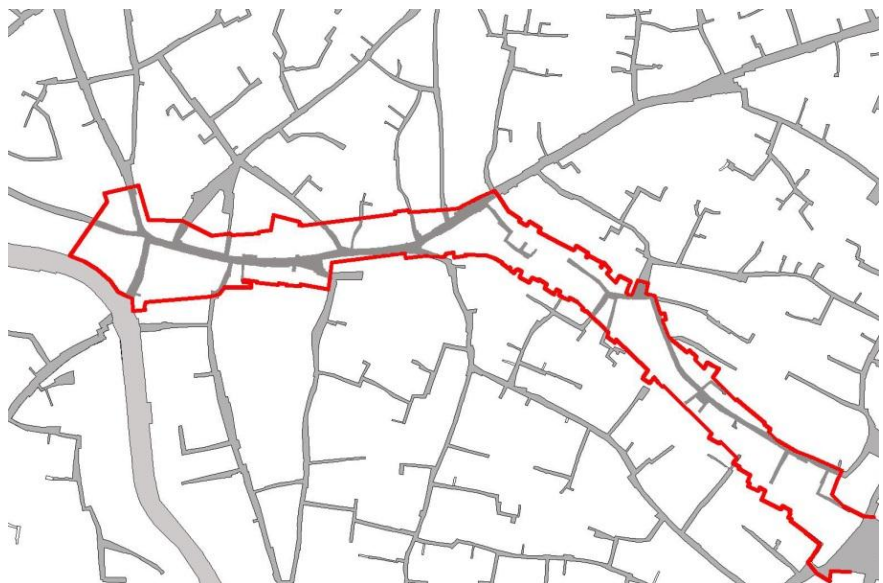
-  The removed streets
-  The street network
-  Khandak Street
-  The boundary of the constructed boulevard

Figure 53. Map showing the boulevard cutting the previous street network

Source: (Author, 2014)



The construction of the boulevard was the outcome of the previous proposed strategy of Gutton that aimed to link the east to the west though its exact location would be fixed with Banshoya plan. Therefore, the location of the boulevard acts as the main vehicular axis linking these two parts. It constitutes the main horizontal axis in the Old City that crosses the center and links the two peripheries of the east and the west (Figure 54). Although its location enables to link the city's both parts, the development that was supposed to follow was not implemented. Consequently, the boulevard only cuts through the urban fabric as a means to allow the vehicular circulation. It only serves the mobility movement allowing it to flow with its own linear geometry leaving the neighborhood of Quadi Askar without any further development as it is disengaging the road and the buildings from each other (Marshal, 2004:6).

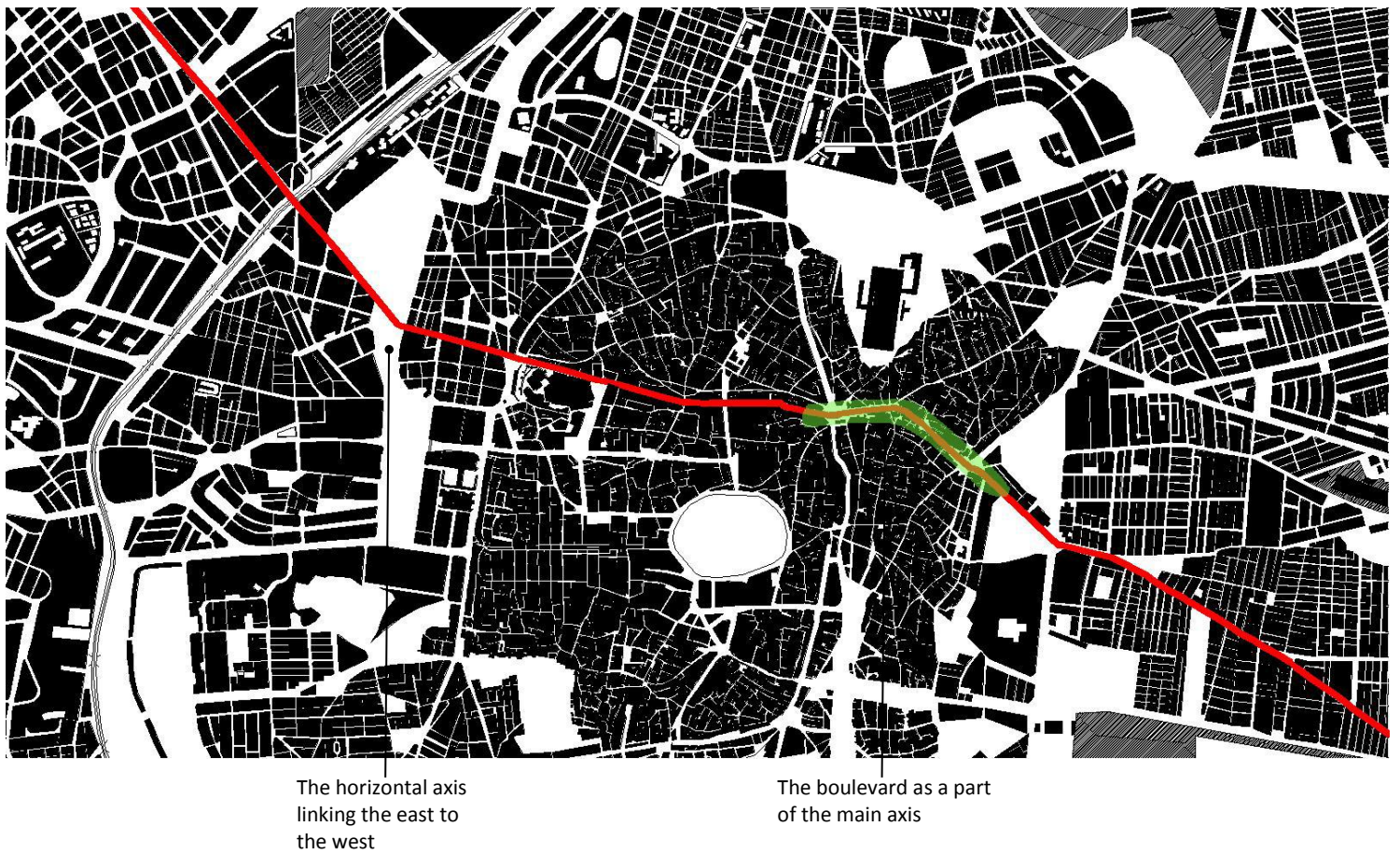


Figure 54. Map showing the position of the boulevard in the Old City

Source: (Author, 2014)

Block morphology

The implementation of the boulevard changed the block morphology on the neighborhood level (Figure 55). Unlike the previous pedestrian style network that underlined the boundaries of the blocks, the boulevard separated and bisected the blocks which created new edges that were exposed to the road traffic. Consequently, the new edges are not aligned with the street as they are affected by the break of the boulevard causing buildings and internal courtyards to be exposed to the boulevard too. Moreover, the boulevard demolished parts of the buildings and caused the neighborhood to have remaining demolished blocks on the front and previous traditional neighborhood blocks behind (Figure 56).



Figure 55. Map showing the bisected edges of the boulevard
Source: (Author, 2014)

The new frontages of the blocks that are exposed to the traffic road

The pedestrian network that surrounds the blocks





-  The new edges of the blocks
-  The demolished parts of the
-  The remaining of the demolished blocks
-  The neighborhood blocks



Figure 56. Map showing the effects of the boulevard on the bisected blocks
Source: (Author, 2014)

Building morphology

The construction of the boulevard had serious effects on the buildings. It caused the destruction of many buildings that were located on its trajectory (Figure 57). The organic fabric of the neighborhood was also interrupted as the boulevard destroyed the organic buildings' distribution. The buildings are situated on the walls of each other as they don't follow any linear grid network but only their successive accumulative expansion. This practice retained residual part of the buildings when there was substantive part of the structure to be retained. Therefore the edges of the boulevard are surrounded with different types of buildings: partially destroyed and open to the street, restored facades treated with fences awaiting a new planning development, and new added facades on the frontage as a work of refurbishment (Figure 58, 59, 60).



Figure 57. Map showing the resulted types of buildings after the boulevard's construction

Source: (Author, 2014)



Figure 58. Map showing the different treatments of the resulted left over spaces on the edges of the boulevard
Source: (Author, 2014)

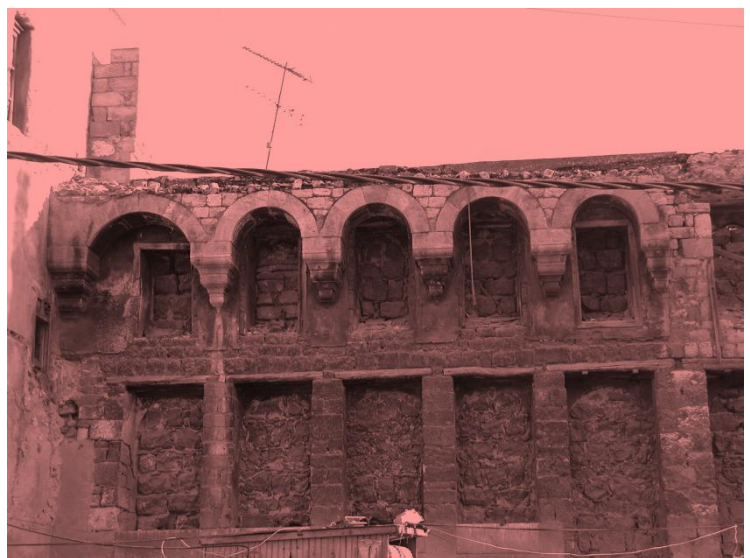
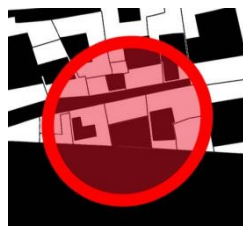


Figure 59. An example of facade that is cut and open to the street
Source: (Author, 2014)

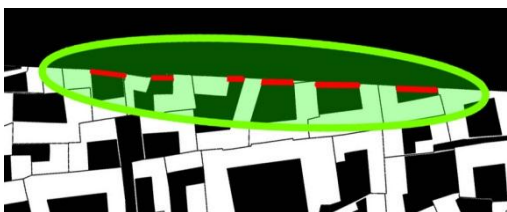


Figure 60. An example of a refurbished facade treated with a fence and awaiting the new development
Source: (Author, 2014)

Refurbished facades

Fences to protect the internal courtyard that is open to the street

It is interesting to notice that on the vacant lots where the buildings were situated and on the ruins of the damaged buildings, some informal practices are implemented by the dwellers. These practices did not follow any urban rules that relate to the area's classification as a world heritage site banning any new intervention on the landscape. These acts have led to incremental work on the vacant lots on the edges of the boulevard causing to have new frontages that are anomalous in function, legislative, and physical qualities (Figure 61, 62).



Figure 61. Image showing the incremental work on the edges of the boulevard as retail shops

Source: Retrieved 2014 from <http://photo.halabnews.com/>



Figure 62. Image showing the character of the street

Source: Retrieved 2014 from <http://photo.halabnews.com/>

Open spaces morphology

It is crucial to know that the internal courtyards of the houses were also affected by the boulevard construction. Since they form one entity with the house and are located in the heart of the house, they also got destroyed. The geometry of the courtyard was deformed and its principles were encroached. The open private spaces of the houses exploded to the outside exposing the internal private style of the house to the outside. Therefore some stone fences were built on the edge that faces the boulevard to prevent these open spaces from being encroached upon undesirable uses.

Another point worth mentioning is that when the boulevard was constructed, it was lowered to make it on the same level as the preceding Khandak Street. However, the difference in the levels necessitated building stairs on the edges of the boulevard to cross the way to the other side of the neighborhood (Figure 63).



Figure 63. Shows the stairs linking the boulevard to the other side of the neighborhood

Source: Retrieved 2014 from <http://photo.halabnews.com/>

5.5.3. Porosity

From the analysis of the previous schemes, it can be deduced that porosity existed in the heart of the neighborhood. However, this porosity was cut and took other representations when reaching the boundaries of the boulevard. It is not the porosity of the fine street network that allowed seepage between the residential clusters, but instead the vehicular flow that caused the buildings to be exposed to the boulevard. The internal courtyards became open to the outside allowing what was defined as private to become public. Their exposure to the boulevard allowed for a “free flow” instead of some “seepage” and permitted the violation of the private spaces of the internal courtyards. In this act, the porous street network became overlapped with the open internal courtyards; it affected what determined the distinction between the public and the private. Consequently, the porosity on the edges is loose and misrepresents the public and the private open spaces (Figure 64).

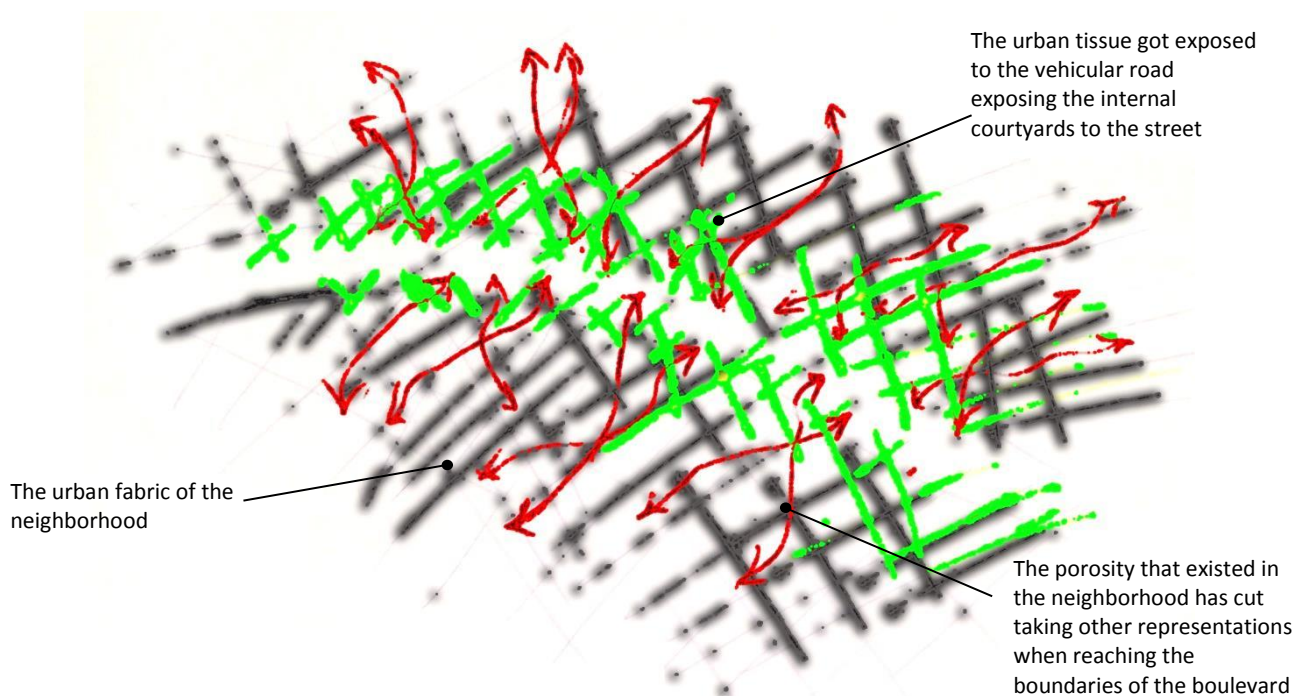


Figure 64. Shows the change of porosity that is demonstrated on the edges of the boulevard

Source: (Author, 2014)

5.5.4. Authenticity

The urban growth of the area stopped when the boulevard was constructed as it cut through the neighborhood. The area used to act in an interactive manner among the dwellers allowing this urban tissue to grow. This growth was receptive to the changes of physical, economic, and cultural conditions. Thus, this interweaved urban tissue was an authentic product of the previous conditions. Consequently, the area was subject to ongoing urban connections that reflects people's relation to places. However, this boulevard produced urban conditions that are different than its original context and not based on a simultaneous growth. It was based on an imposed superstructure element that allows for a through traffic to overpass the heart of the urban neighborhood, and for new typologies to emerge out of scale with the traditional neighborhoods.

The neighborhood had always been a product of an authentic growth of the dwellers' interaction among each other and towards the places they use. This infrastructural break created new conditions on the edges of the separated parts of the neighborhoods and also on the interface area of its sides. The edges were left hanging and open to a new growth and intervention and their character is not reflecting the authenticity of the urban growth of the neighborhood that stand behind (Figure 65).

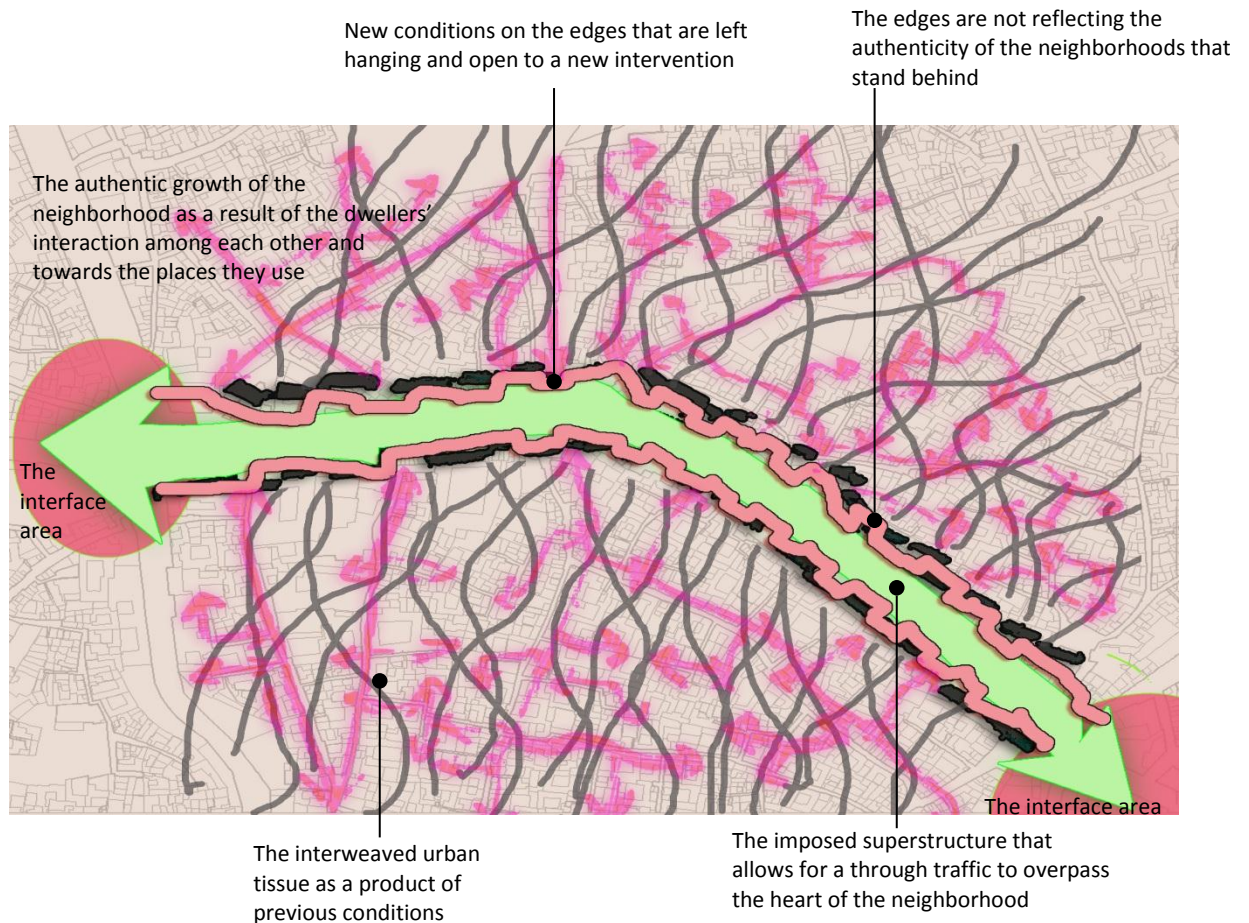


Figure 65. Map showing the edges' new urban condition that does not reflect the authenticity of the neighborhoods that stand behind

Source: (Author, 2014)

5.5.5. Vulnerability

The construction of the boulevard was to be codified with a development plan that dictated new typologies of modern buildings. Their construction required the demolishing of additional old buildings on both sides of the boulevard (Figure 66). This procedure would add a new urban system on the edges of the boulevard creating high barriers that cover the old neighborhoods behind. These high-rise buildings would be situated on a grid block scheme facing the boulevard. These structures would have a new legislative urban system over the existing urban fabric; since they were to be imposed higher than the building clusters behind them; they violate the

privacy of these clusters; they overlook the buildings, and they overshadow them (Figure 67). The implementation of this plan veered away from the site context and culture; it imposed control and rigid vision of Modernist tendency in freeing the ground for vehicular movement. This plan would increase the separation that was created by the boulevard by inserting the high-rise structure in a way that would emphasize the disparities of social, economic, and physical characters of the area.

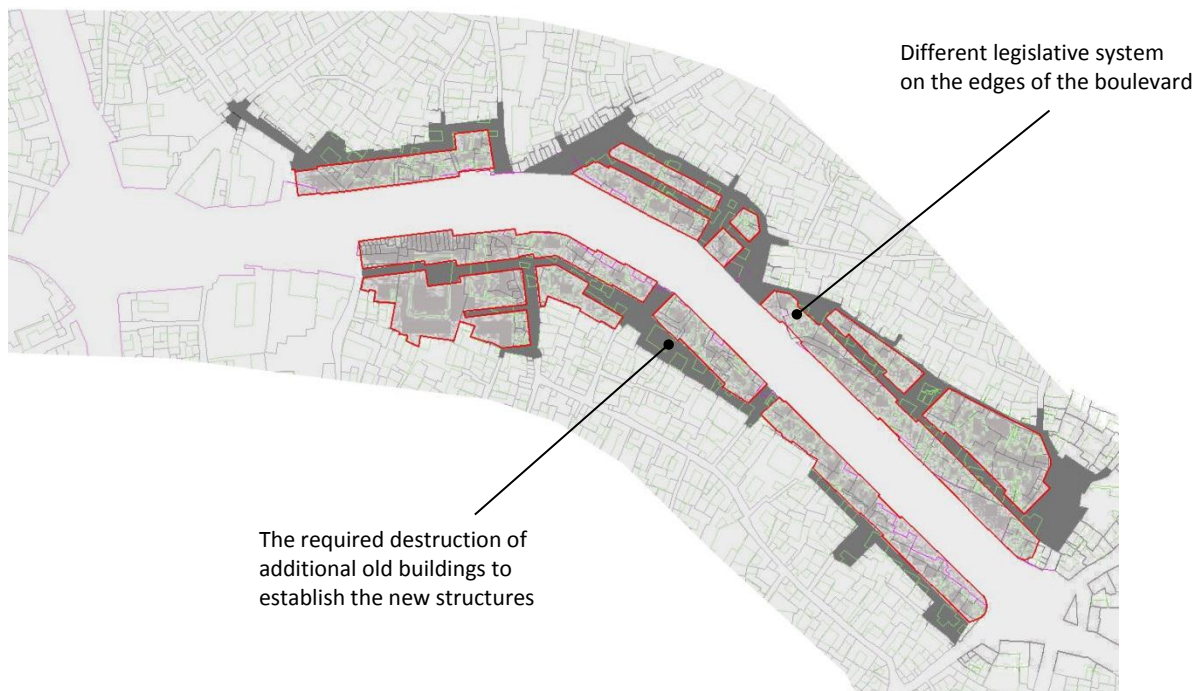


Figure 66. Map showing the additional destruction of the old buildings to build the new ones

Source: (Author, 2014)

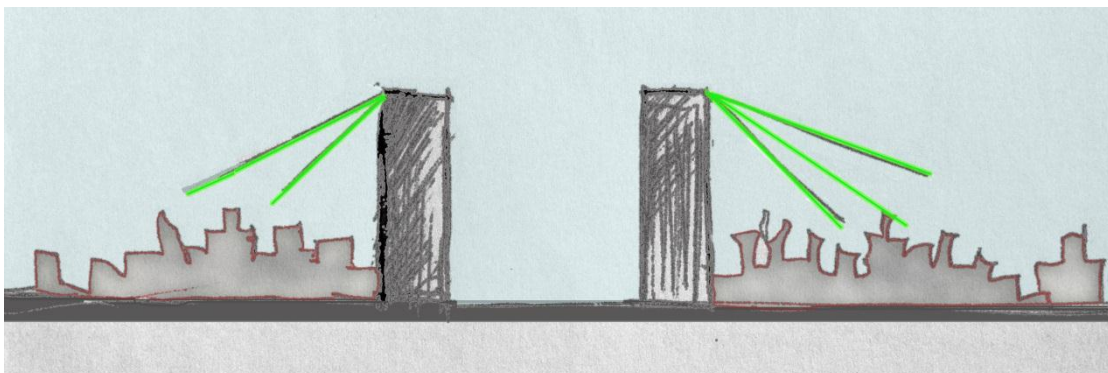


Figure 67. Section showing the high-rises that are overlooking the old neighborhood behind

Source: (Author, 2014)

5.6. The study area during the war

The Old City expanded over time and added layers to its urban form that enhanced its authenticity. However, the destruction caused by war has cut all the Old City's connections to its peripheries that fed the growth of its economic, social, and physical vitality. The current war has imposed some facts that affected the urban fabric and has led to severe urban fragmentation in the city. This devastating war detached the Old City from its urban system that contributed to its growth, and thus, froze its development. The city decayed to a state of stagnation away from the dynamism that caused its urban transformation. This isolation exposes the city to a vulnerable urban condition that does not allow spontaneous growth since activities and livelihoods of the residents were disrupted.

The destruction of the Old City because of the war caused dynamic commercial activities to be halted. The hybrid harmonious relationship between people and places that existed before the war was cut on the points of intensity that were the access points for the residents coming from the different regions to the Old City. The break of activities is due to physical and social conditions; the facades of the shops were destroyed which affected the commercial activities. Consequently, the hybrid mixed uses that existed before the war were disrupted because of the lack of interaction between people and places. The concept of porosity took other meanings, it is no longer about the Medina and its periphery throughout its gates, nor about the boulevard and its effects on the buildings; the Old City is now in isolation and obstructed from the surrounding peripheries.

Taking the case of Quadi Askar Boulevard, the current war exacerbated the situation of the area exposing it to more isolation and neglect which affects its growth and

progress. The destruction of the facades during the execution of the boulevard is similar to the current destruction because of the war. The consequences can be defined in the damaged facades and the demolished buildings leaving behind numerous undefined places and abandoned buildings. The documentation that can be used to show the case depends on images of the area retrieved from YouTube videos and news footage to demonstrate the level of destruction (Figure 68, 69).



Figure 68. Image showing the destruction of the buildings in Qadi Askar boulevard area because of the war

Source: Retrieved 2014 from <http://photo.halabnews.com/>



Figure 69. Image showing the destruction of the façade in Qadi Askar boulevard area

Source: Retrieved 2014 from <http://photo.halabnews.com/>

5.7. Conclusion

This study by focusing on analyzing the elements of integral urbanism through time contributed in understanding the city's layers and urban transformation. It aimed to show the effects of the Modernist practices in the eastern part of the Old City that was neglected over time. Also, it aimed to show the uniqueness of the study area when the qualities of hybridity, connectivity, porosity, vulnerability and authenticity were more vivid before the construction of the boulevard and before the war. Moreover, the study shows the opportunities and constraints to enable urban designers to intervene and propose design strategies and guidelines that fit within the urban context and the transformation of physical, social, and functional characteristics of the area. In the following chapter, the implementation strategy will be explained in depth based on the analysis of this chapter.

CHAPTER 6

URBAN DESIGN STRATEGY AND INTERVENTION

6.1. Introduction

The area of Quadi Askar Boulevard outside of the walled city did not witness any urban intervention since the construction of the boulevard. It was neglected and left undeveloped waiting for a new proposed development of high rise buildings with new land uses to be implemented. The construction of the boulevard had harsh effects on the urban fabric leaving undefined edges on its sides lacking a clear urban and architectural identity. It produced bisected buildings and open spaces that have certain typologies on the edges of the boulevard. These conditions are further exacerbated because of the current war. Therefore, dealing with the urban conditions resulted of the destructed facades and buildings is similar in the both cases. Design guidelines will be proposed as a means to deal with damaged facades.

This chapter will explain the strategies that will be used to deal with the current conditions of the buildings. It focuses on re-invigorating the public space and on façades treatment as a means to bring back the authenticity of the Old City and turn this neglected boulevard into a dynamic axis full of activities along its sides. This part of the Old City presents an important opportunity to improve the living conditions of the dwellers and the physical landscape, and thus link this enhanced boulevard to Khandak Street as a continuous horizontal axis linking the east to the west.

6.2. Design strategy

The strategy aims to turn the boulevard into a dynamic spine filled with activities that existed before the construction of the boulevard which also continued partially after its construction. The strategy will focus on demonstrating the characteristics of integral urbanism that exists in the Old City by proposing a building strategy and a streetscape strategy using these characteristics.

The construction of the boulevard produced different types of undefined open spaces and bisected buildings. These types exist neither in the adjacent district nor in the Old City itself. Thus, the case study of the boulevard presents a unique case that requires urban design strategy using the characteristics of integral urbanism as a method for implementation.

The proposed design strategy will focus on preserving and enhancing the relationship between the built form and the urban spaces which will also enhance peoples' relation to place. This strategy will turn the boulevard into a dynamic spine that will preserve the composition of the solid and voids of the buildings and the open spaces, and make use of them in a way that allows transforming them into active open spaces and buildings. This is further enhanced by choosing façade treatment similar in texture and proportion, though not necessarily in form, to the existing façades.

The following figures (70 to 75) show the strategy that will be used in this study by using the characteristics of integral urbanism and applying them on the edges of the boulevard; on the left over spaces and on the remaining buildings. It aims to enhance connectivity on the neighborhood level by improving the pedestrian experience and on the district level by turning this boulevard into a dynamic spine and linking it to its peripheries. It also aims to preserve the existing retail shops and to propose new ones

to allow for hybrid activities; propose porous authentic frontages of open courtyards; maintain the authenticity of the buildings; and preserve this vulnerable composition of solid and void frontages. These actions will turn the boulevard into a dynamic place that allows for interaction among people and between people and places.

An in-depth analysis of the current situation of the edge of the boulevard shows the conditions caused by its construction that left the courtyards open to the street. It also shows the temporary treatment of the bisected facades by adding high fences or building artificial frontages to be used as retail shops. One of the scenarios that I propose shows the suggested development that exploits the characteristics that exist in the city and exposes them to the streets using the theory of integral urbanism. It aims to preserve the authenticity of the buildings by keeping the same typology of the internal courtyard buildings, and also preserving the solid and void composition on the ground level. It also aims to propose a new function to these bisected buildings that are neglected and abandoned to turn them into hybrid activities that will function as retail shops and use their internal courtyards as open public spaces. This proposed study will create a porous relationship between the pedestrians, buildings, and the streets which will give back the neighborhood its urban lively character.

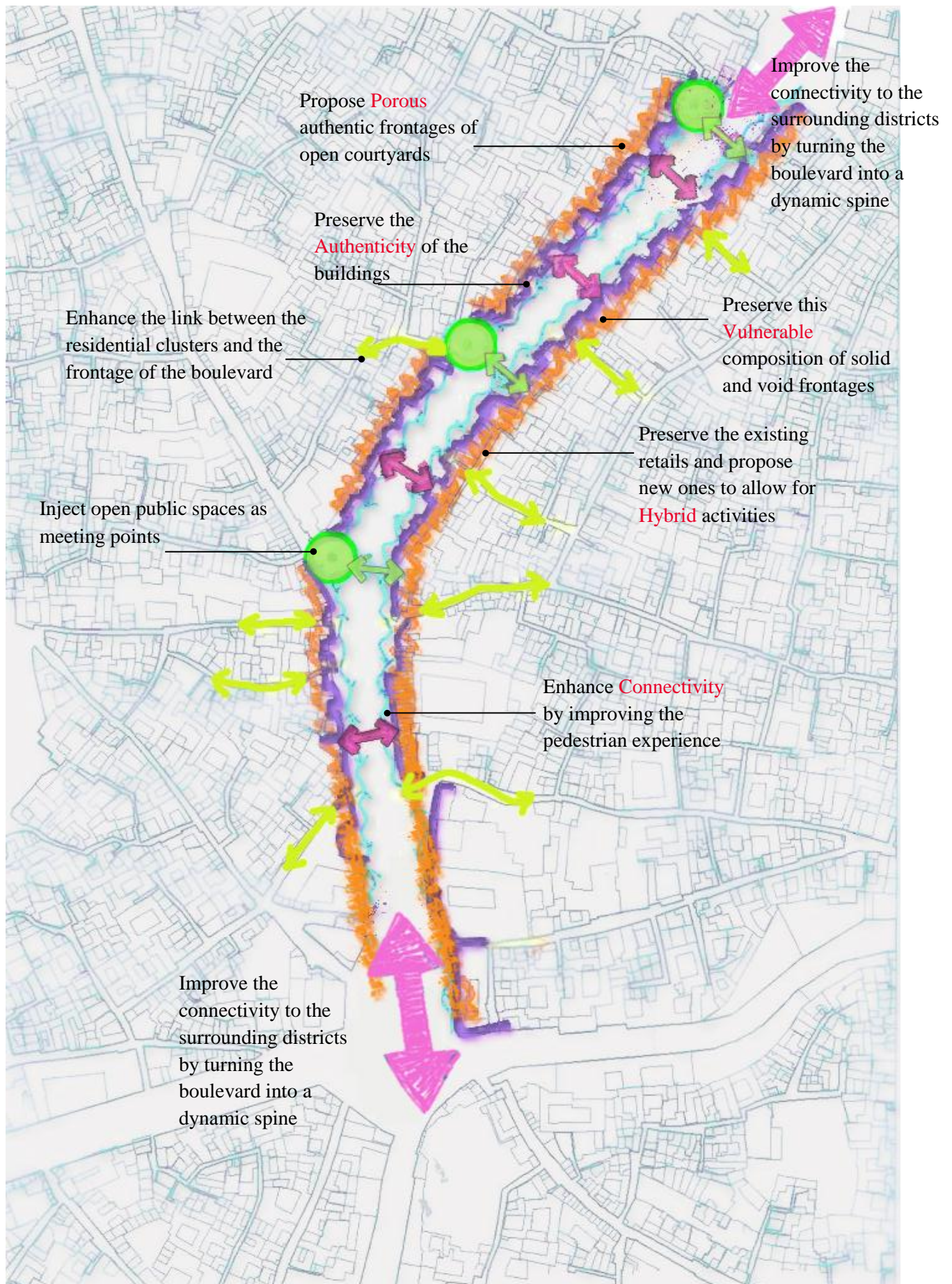


Figure 70. Shows the strategic plan using the elements of integral urbanism

Source: (Author, 2014)

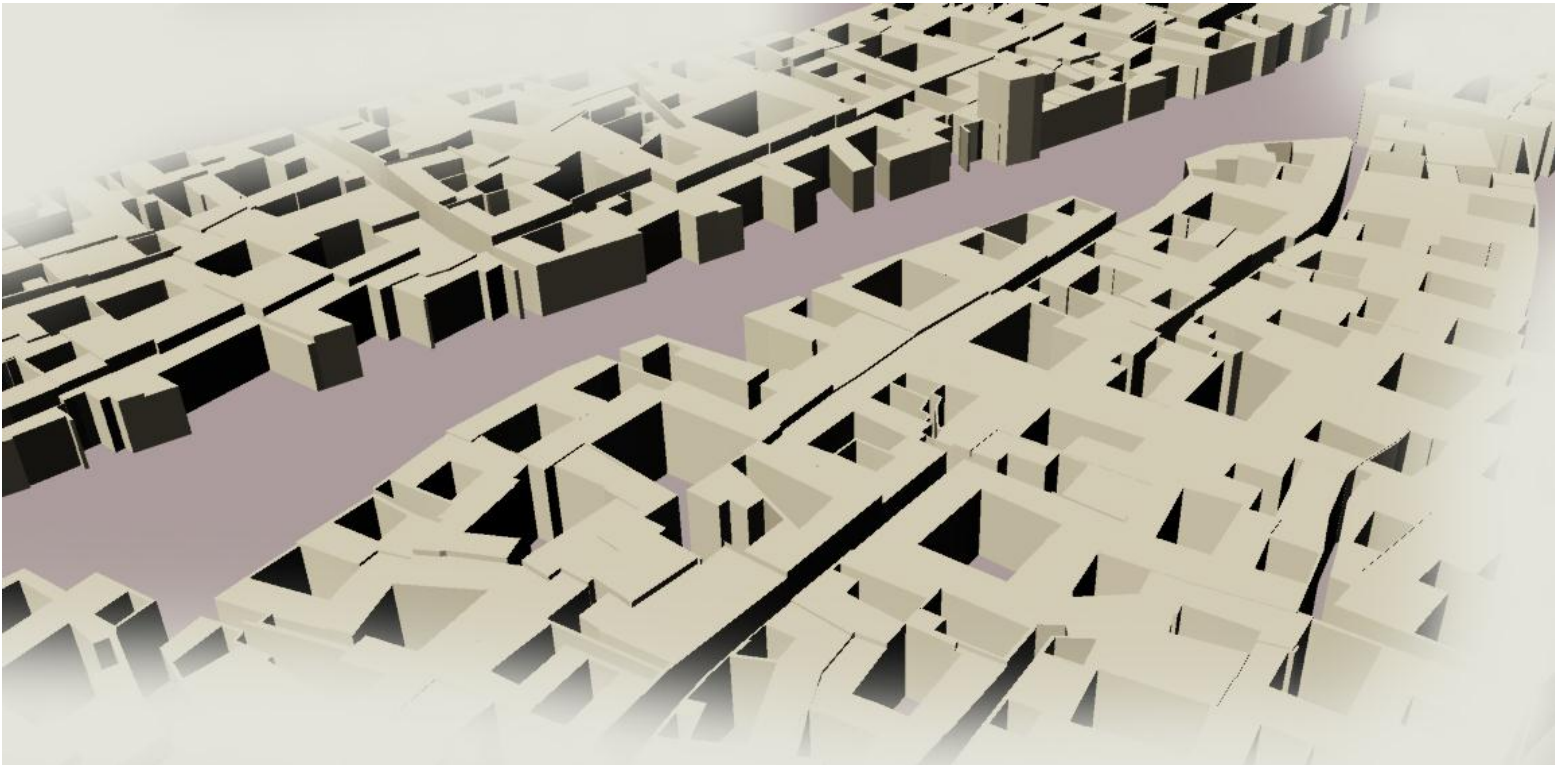


Figure 71. Shows the composition of the solid and voids and the typology of buildings resulted from the construction of the boulevard where it cut the urban fabric facing the boulevard

Source: (Author, 2014)

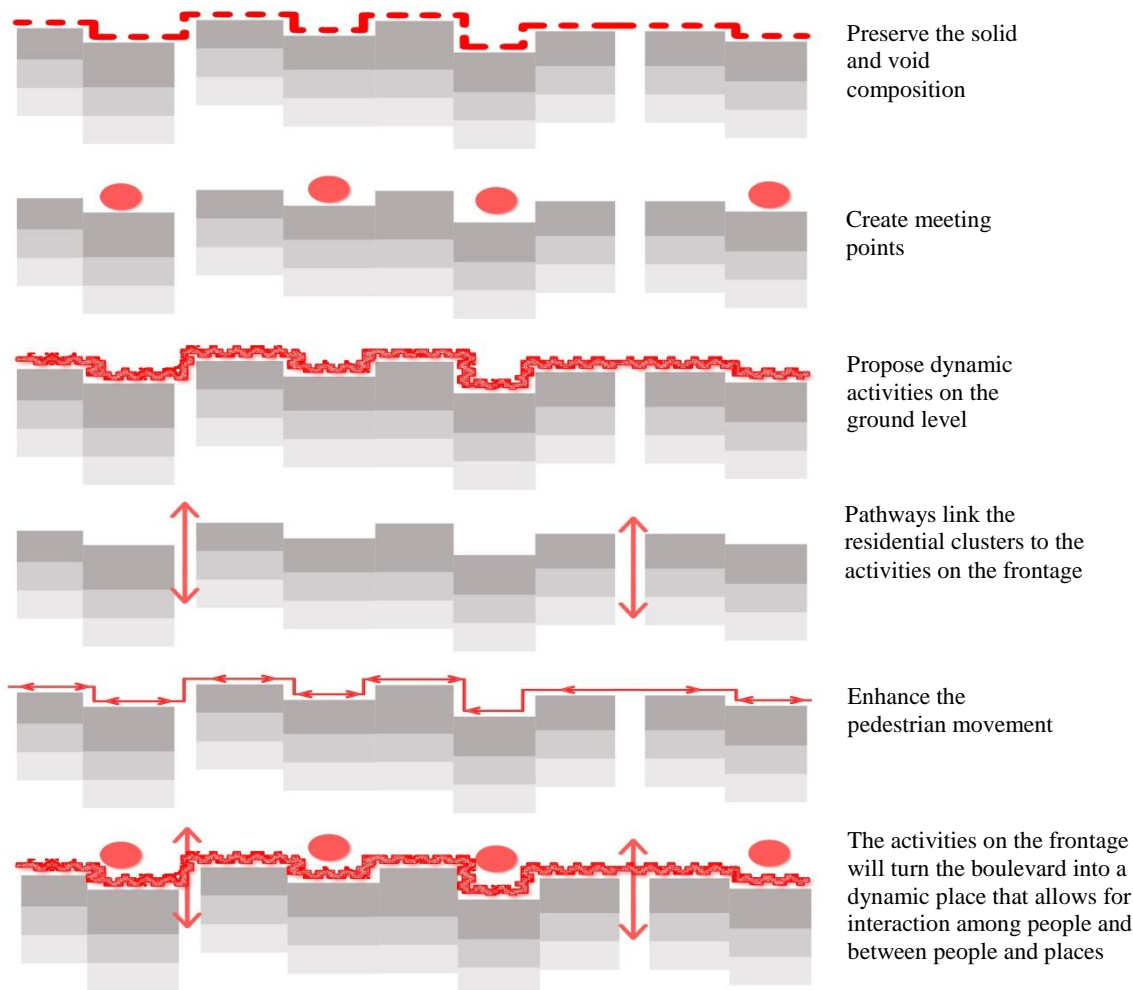
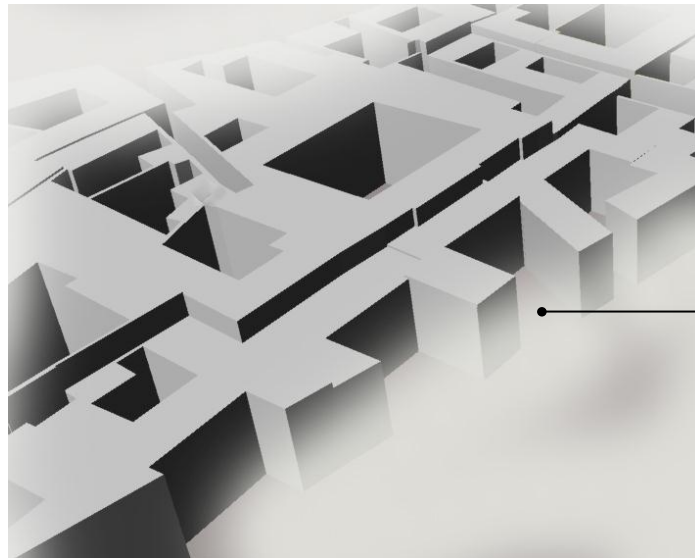


Figure 72. Shows the application of integral urbanism characteristics on buildings and open spaces

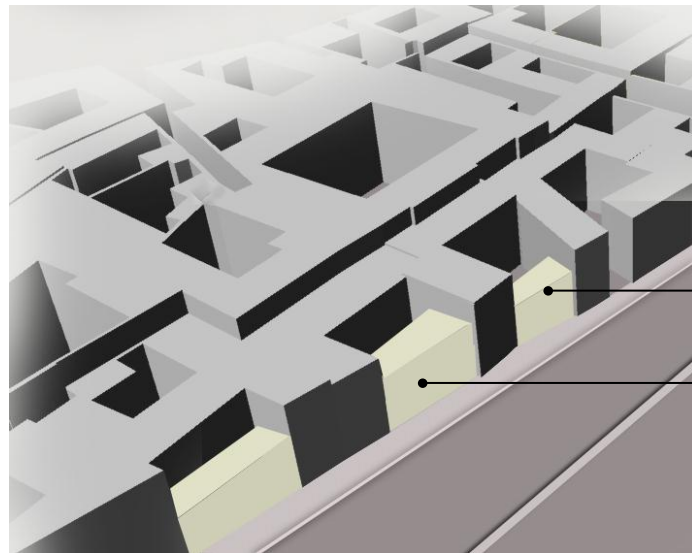
Source: (Author, 2014)

Figure 73. Shows the resulted buildings' condition on the edges of the boulevard
Source: (Author, 2014)



Internal courtyards are exposed to the outside

Figure 74. Shows the treatments of the facades that proceeded the boulevard construction
Source: (Author, 2014)

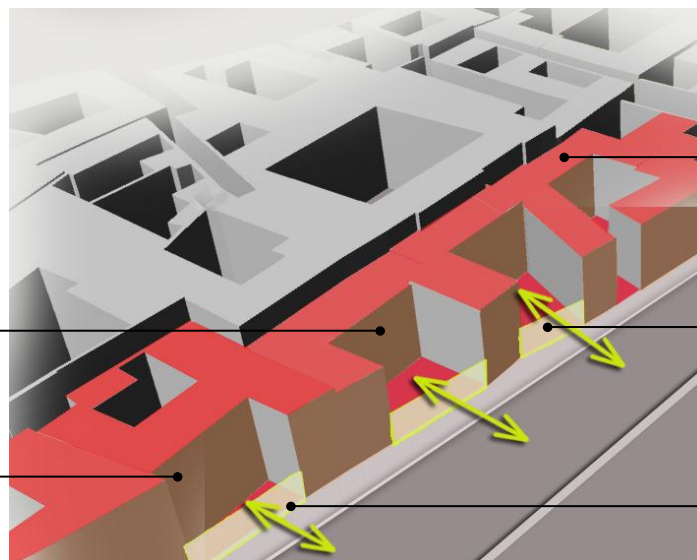


The open edges are built and used as shops

The temporary treatment of the bisected facades by the residents of the buildings after the construction of the boulevard

Preserve the authenticity of the buildings by keeping the same typology of the internal courtyard buildings

Solid/void composition on the ground level



Hybrid activities on the ground level

Use the internal courtyards as open public spaces

Porous relationship between the pedestrians and the built landscape

Figure 75. Shows one of the proposed development using the elements of integral urbanism
Source: (Author, 2014)

6.3. Urban design recommendation

Urban design recommendations are proposed in order to achieve the intended strategy of turning the boulevard into a dynamic spine that caters for local activities:

- Propose action area plans that deal with the specificities of each part of the boulevard based on its function and based on the physical landscape.
- Propose a streetscape strategy that will enhance the condition along the boulevard for the pedestrian movement and slow down the traffic to allow for the crossings between the two parts.
- Enhance the visual, spatial and physical quality of the existing neglected open spaces and link them together by the pedestrian crossings and the sidewalks.
- List the archeological buildings and propose special treatments and maintenance techniques for the deteriorated ones.
- Preserve the composition of the neighborhood and balance the relation between “the urban continuity and the contemporary architecture” and “respect the guiding principles for architectural intervention” Unesco, 2011.
- Emphasize a minimum intervention on the buildings that need renovation favoring the indispensable treatments for the conservation of specific parts.
- Respect the urban character and the privacy of the old neighborhood in the parts where to implement new buildings as the heights should not exceed 3 floors.
- Propose land use strategy that focuses on an adaptive reuse of the courtyard buildings by adding retail shops and opening these buildings to the street to allow for porous interactive relation between the pedestrians and the places.

6.4. Analysis of the study area

Parcel analysis

The party walls map shows the direction of the parcels and its agglomeration around the important nodes (Figure 76). This map demonstrates the size of the parcels on the edges of the boulevard. The variation of the size of the parcels reflects the function of the buildings located on these parcels. Moreover, the orientation of the buildings shows the cohesive integration of the built fabric that contains the same functions of the buildings' clusters (Figure 77).

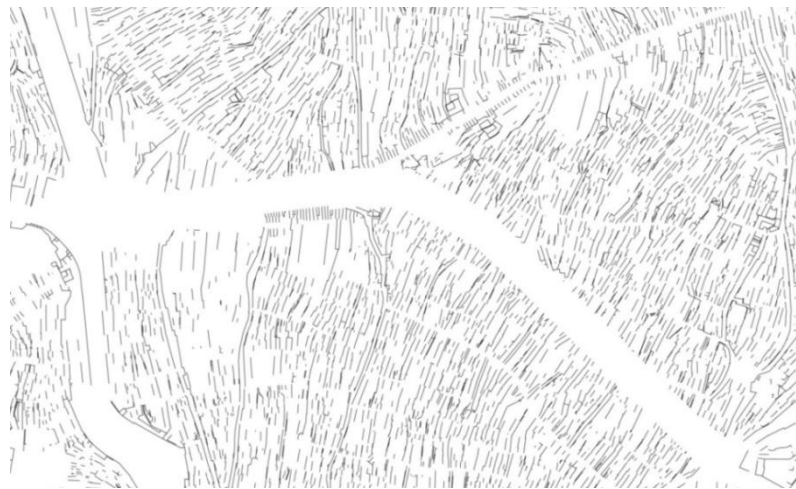


Figure 76. Party wall map of the neighborhood
Source: (Author, 2014)

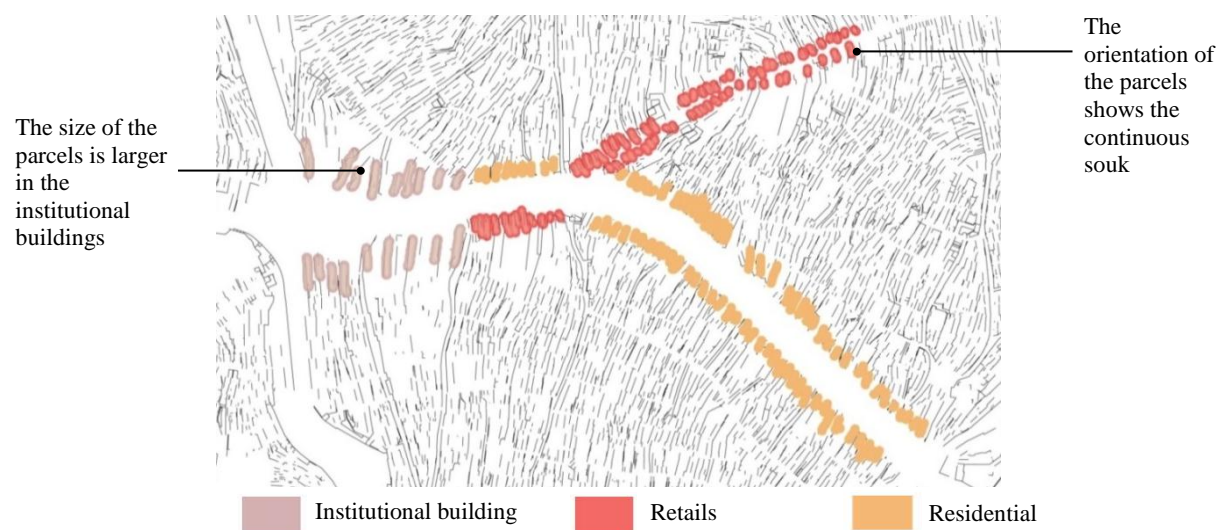


Figure 77. Map to illustrate the size and the orientation of the parcels
Source: (Author, 2014)

The maps and the analysis in the preceding chapters, demonstrate the relationship between people and places that existed before the construction of the boulevard. The buildings formed an integrated fabric dominating the functions and activities of the neighborhood (Figure 78). The boulevard construction has cut this relation that existed between the two parts, and thus it has cut the spacial and functional relationship between them (Figure 79).

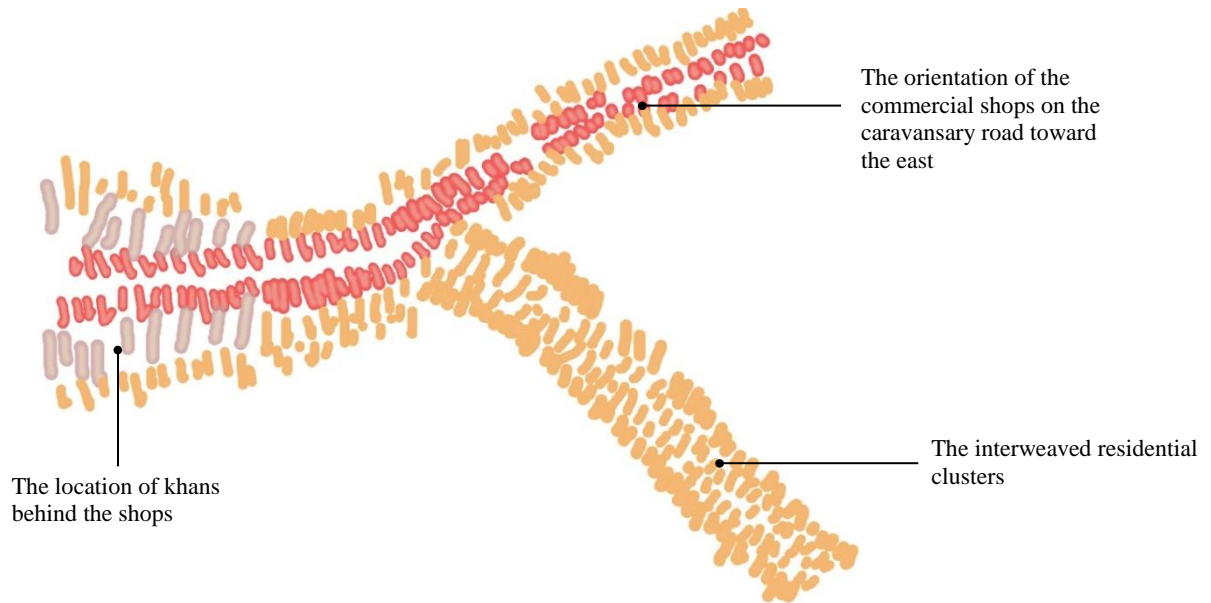


Figure 78. Map to illustrate the distribution of the functions before the construction of the boulevard
Source: (Author, 2014)

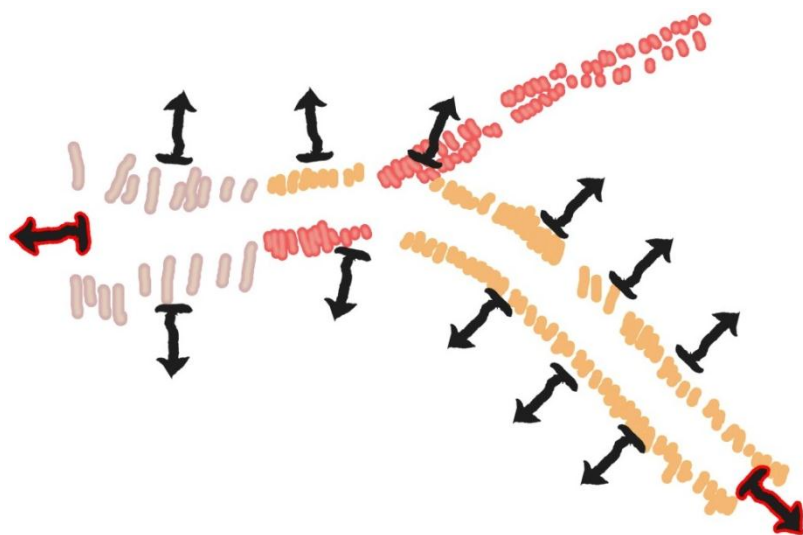


Figure 79. Map showing the impact of the boulevard on its edges and the adjacent districts
Source: (Author, 2014)

6.5. The implementation of the strategy

In order to implement the mentioned strategy, a spatial/functional zoning strategy and a streetscape strategy are proposed. A zoning strategy for the ground level will define the functional and the spatial character of the area. A streetscape strategy will focus on the vehicular and the pedestrian movement in order to complement the zoning goals and the proposed recommendations for a well preserved and sustainable environment. Action areas will be selected from the zoning map which will show the special treatment of each case based on its context and will show the implementation of the streetscape strategy.

6.5.1. Spatial/functional zoning strategy

Analyzing the area showed the harmonious interrelation of activities, residential clusters and pedestrian dynamics functioning in one entity and producing what is considered as a prominent character of the Old City. Therefore, my main focus is to identify the qualities that exist in this part of the Old City and build on them in order to reinforce these qualities, and thus propose designs that correspond to the city's complexion. This site will be divided into three spatial/functional zones; Institutional, commercial, and mixed use zones of residential and commercial. A design strategy is proposed in each of these zones as a means to show the relevant treatment of each type of the resulted cases along the boulevard (Figure 80).

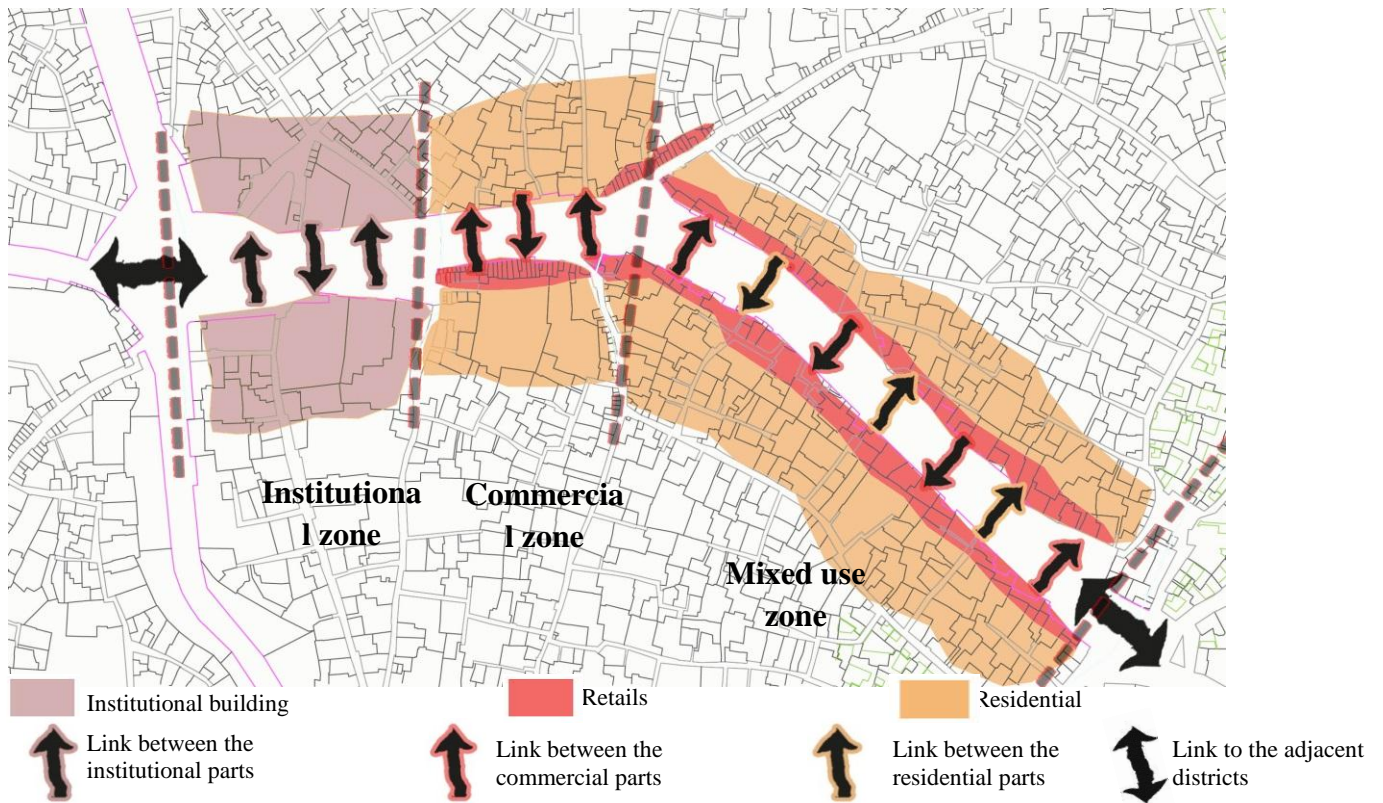


Figure 80. Zoning strategy map
Source: (Author, 2014)

6.5.2. Streetscape strategy

The study proposes a plan on the streetscape level in order to transform the boulevard from a through traffic axis into a pedestrian friendly and dynamic spine full of activities, and also to reinforce the link to the inner neighborhood streets. The plan seeks to slow down the car circulation to produce a pedestrian friendly environment. Sidewalks are enlarged to allow for the pedestrian movement to and from the residential buildings and the shops. The median is widened to allow for crossing between the two neighborhoods, and thus the traffic lane is reduced to decrease the car flow. Moreover, parking lane is proposed in certain locations bordering the sidewalks as a means to serve the shops and the visitors. This improvement in the public domain will enhance connectivity on the district level and the neighborhood level.

6.6. Action areas of intervention

In each zone, I will focus on a detailed design strategy that tackles specific cases on the edge of the boulevard. Therefore, I defined one action area in each of the three zones to present a detailed study (Figure 81). Action area (I) focuses on reinforcing the character of the mixed use area by turning this neglected open space into an active hub that serves the shoppers and the residents of the area. Action area (II) focuses strengthening the commercial character of the caravansary road. It focuses on dealing with the typology of a bisected building and linking it to an open space on the other side of the boulevard, and applying an adaptive reuse strategy for the buildings in front of these open spaces. Action area (III) focuses on preserving the institutional character of the area constituted of mosques and hammas. It focuses on a renovation strategy for Banqusa mosque.

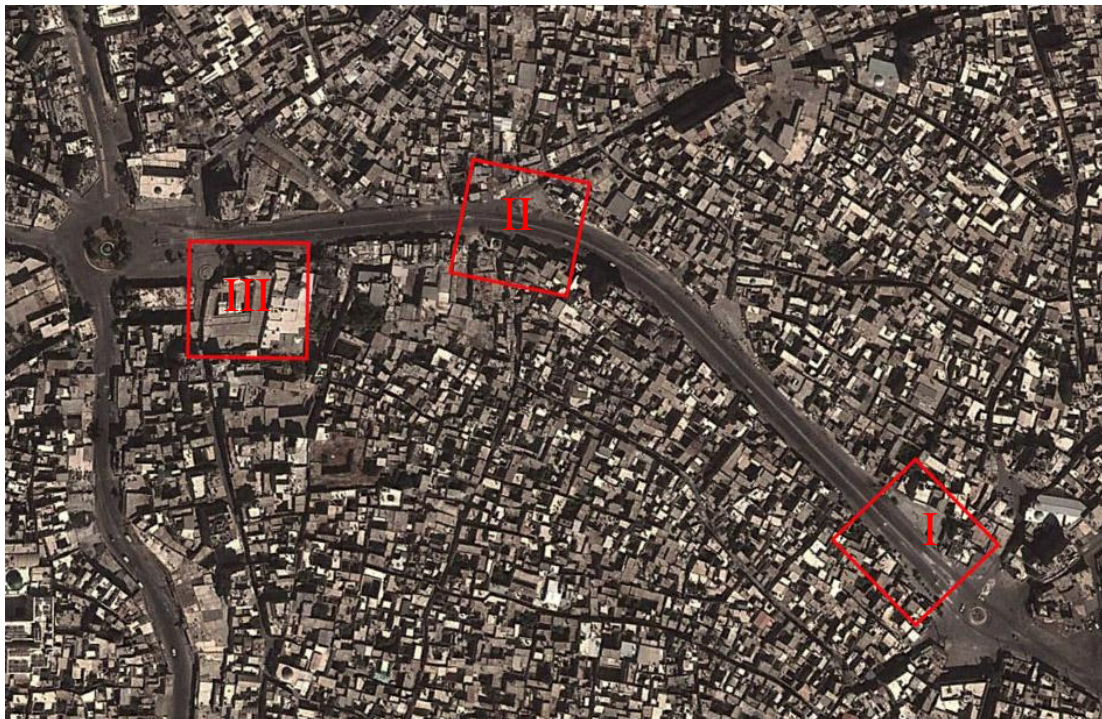


Figure 81. Map showing the location of the action areas on the three zones
Source: “Aleppo.” Map. *Google Maps*. Google. Web. 2013.

6.6.1. Action area I (open public space approach)

This area of the boulevard is the access point to the Old City from the east. The strategy focuses on dealing with the specificity of the site and on avoiding a master plan approach. The case of this action area shows a neglected open space that was formed after the construction of the boulevard on one of its sides and retail shops added on the frontage of the bisected facades on the other side. The strategy does not seek to impose new structures like the already proposed high rise buildings on the frontage, but rather it aims to use the existing structures that are used by people in a way that upgrades their living conditions and enhances the physical landscape.

The strategy aims to turn this left over space into an active hub that attracts the residents of the area and also the visitors. In addition, the strategy aims to preserve the existing shops on the artificial added frontages that present active points for the purchasers, the shop owners and the residents (Figure 82, 83, 84, 85). In addition the intervention will work on the streetscape level by focusing on enlarging the sidewalk, planting trees, widening the median and linking both parts by pedestrian crossings (Figure 86, 87, 88, 89, 90, 91, 92, 93).

This improvement will function on the neighborhood scale in re-stitching both separated parts of the boulevard which in turn will give it a character that will foster its link to the peripheries on the district level, and thus it will boost people's relation to place. Consequently, the implementation of this strategy will create a catalytic effect that can be spread to the other parts of the boulevard.

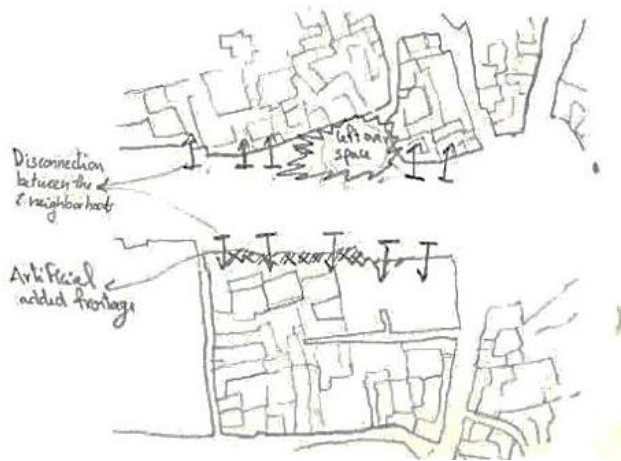


Figure 82. Map showing the existing conditions resulted from the construction of the boulevard in action area I
Source: (Author, 2014)

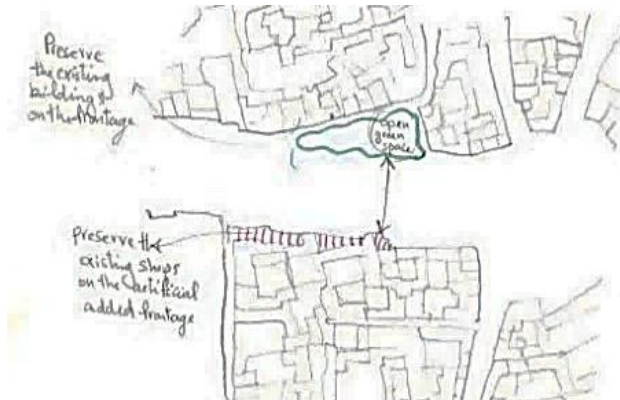


Figure 83. Map showing the strategy concerning the buildings in action area I
Source: (Author, 2014)

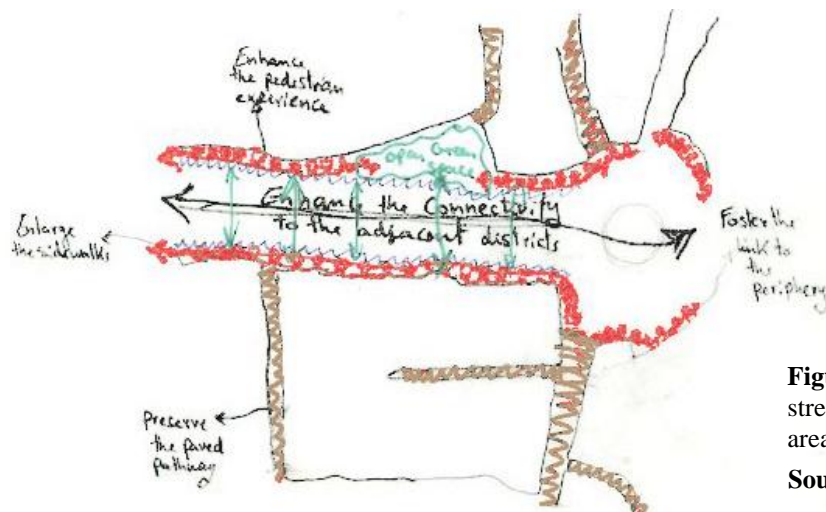


Figure 84. Map showing the streetscape strategy in action area I
Source: (Author, 2014)



Figure 85. Map showing the streetscape and the buildings strategies in action area I
Source: (Author, 2014)

By applying the qualities of integral urbanism in this action area, the strategy will enhance the:

- **Hybridity:** by preserving the added retail frontages on the edge of the boulevard that encourage the mix of activities.
- **Connectivity:** on both sides of the boulevard, first, by enlarging the sidewalks which will encourage the pedestrian movements; second, by preserving the paved pathways linking the residential clusters; third, by proposing parking lanes; and fourth, by creating pedestrian crossings between the two sides and widening the median.
- **Porosity:** by turning the residual spaces resulted from the construction of the boulevard into public meeting points for the dwellers and the visitors.
- **Authenticity:** by preserving the existing buildings that are located on the frontages, and, when needed, adding new ones that respect the character and scale of the area, i.e. the typical heights.
- **Vulnerability:** first, by preserving the present mass and void composition of the neighborhoods fronting the boulevard and preventing further destruction of buildings. Second, by avoiding the master plan approach, and dealing with the specificities of the action area in a way that enhances the resident's living conditions through appropriating existing structures.



Figure 86. Map showing the area before the construction of the boulevard
Source: (Author, 2014)



Figure 87. Map showing the area after the construction of the boulevard
Source: (Author, 2014)



Figure 88. Aerial view map of the site where the shops are located
Source: "Aleppo." Map. *Google Maps*. Google. Web. 2013.



Figure 89. Image showing the retail shops on the edge of the boulevard
Source: Retrieved 2014 from <http://photo.halabnews.com/>

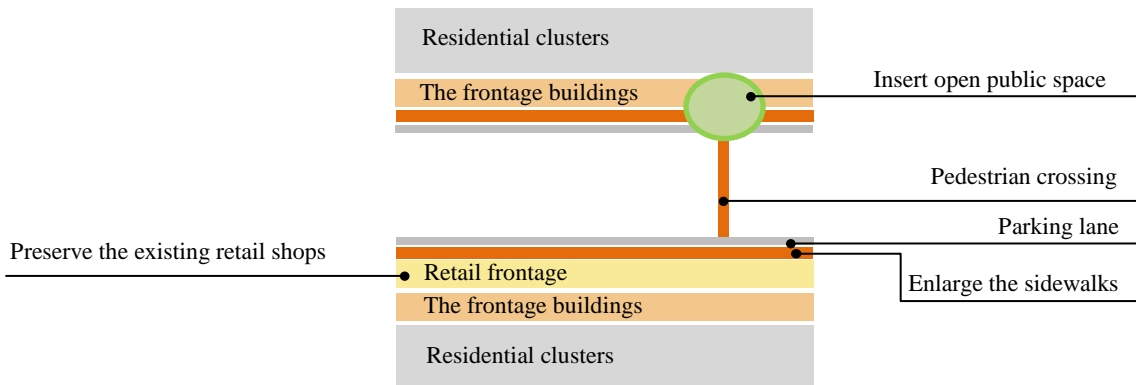


Figure 90. A diagram showing the strategy of the action area I
Source: (Author, 2014)











- | | |
|--|---|
|  The added retail frontage |  Parking lane |
|  The existing buildings on the frontage |  Sidewalks |
|  The residential clusters |  Open public space |
| |  Paved pathways |
| |  Internal courtyards |

Figure 91. Action area plan I

Source: (Author, 2014)

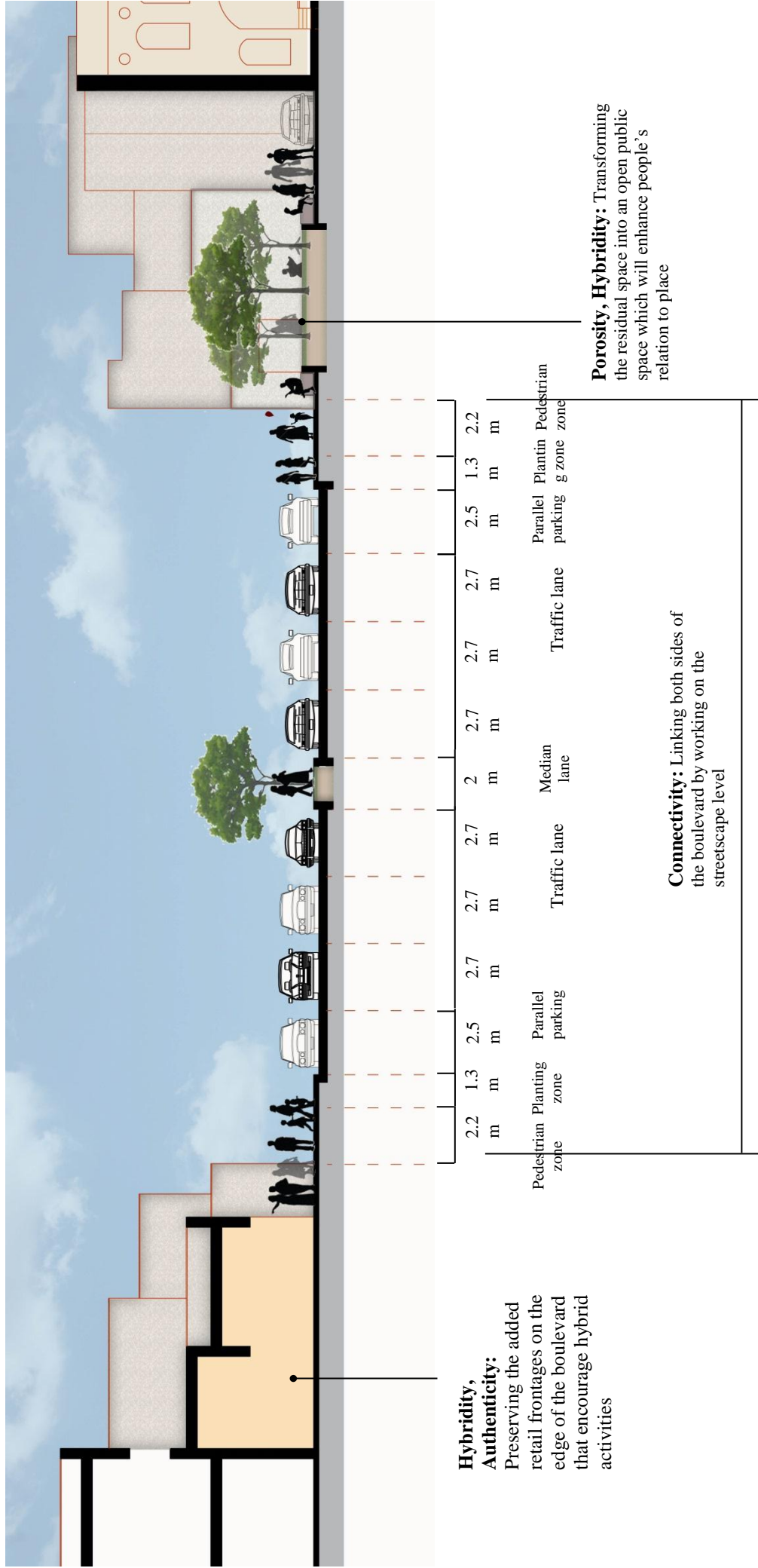


Figure92. Section in action area I

Source: (Author, 2014)



Authenticity:
Preserving the existing buildings

Hybridity:
Preserving the added retail frontages

Vulnerability:
Preserving the composition of the neighborhood and avoid further destruction to build new buildings

Connectivity: Enlarging the sidewalks, creating parking lanes, and widening the median for pedestrian crossings

Figure 93. Shows a sketch of the proposed action area I

Source: (Author, 2014)

6.6.2. Action area II (adaptive reuse approach)

This area of the boulevard contains bisected facades on one side of the boulevard and a left over space used as a parking lot on the other side. The intervention classified the area as a commercial zone based on the area's previous uses and scale of residual parcels. Therefore, the concept focuses on treating the open spaces and facades in a way that reproduces the commercial character that the area once had.

The strategy is to link the open space in front of the bisected façade on one side of the boulevard to the open space on the other side of the boulevard. This link will be through the pedestrian crossing that will connect the two parts together. This relation will be reinforced by transforming this parking space into a green open space for public use, and use the space in front of the facade as an open public space (Figure 94, 96). Moreover, a renovation strategy is proposed to maintain this old facade and the courtyard house behind it. The facade will not only function as a preserved monument, but it will also be the gate enables the visitors and the dwellers to use the house behind (Figure 95, 97). Consequently, an adaptive reuse strategy is proposed in this zone to make use of the old house and open it to the public. The house will be turned into a khan that is constituted of shops, and the internal courtyard of the house will be used as a meeting point for the shoppers, traders, visitors and dwellers. The adaptive reuse strategy will also be applied on the buildings facing the open space on the other side. Consequently, this proposed work will reinforce the commercial character of the caravansary road that existed before and bring the visitors and the residents from the other districts (Figure 98, 99, 100, 101, 102, 103, 104,105).

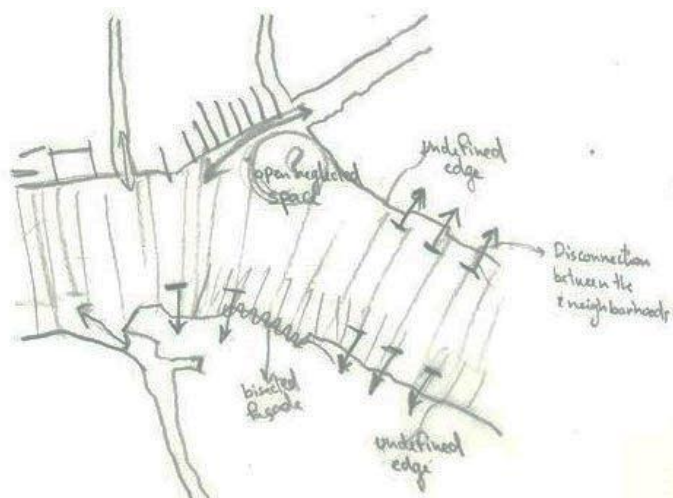


Figure 94. Map showing the existing conditions resulted from the construction of the boulevard in action area II
Source: (Author, 2014)

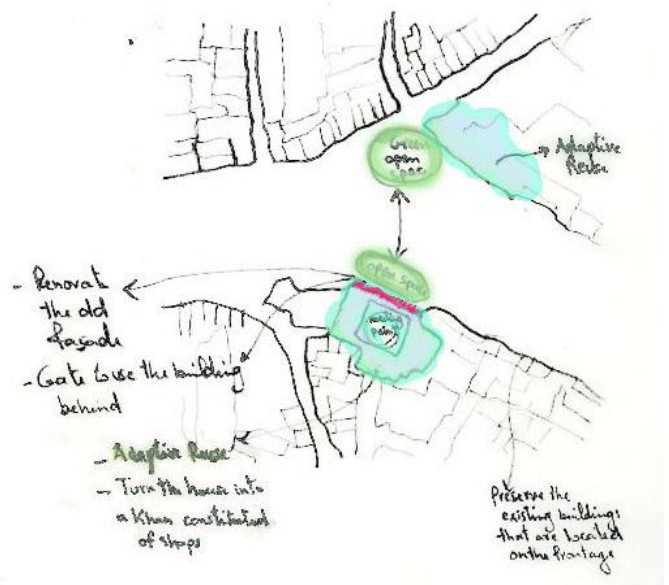


Figure 95. Map showing the strategy concerning the buildings in action area II
Source: (Author, 2014)

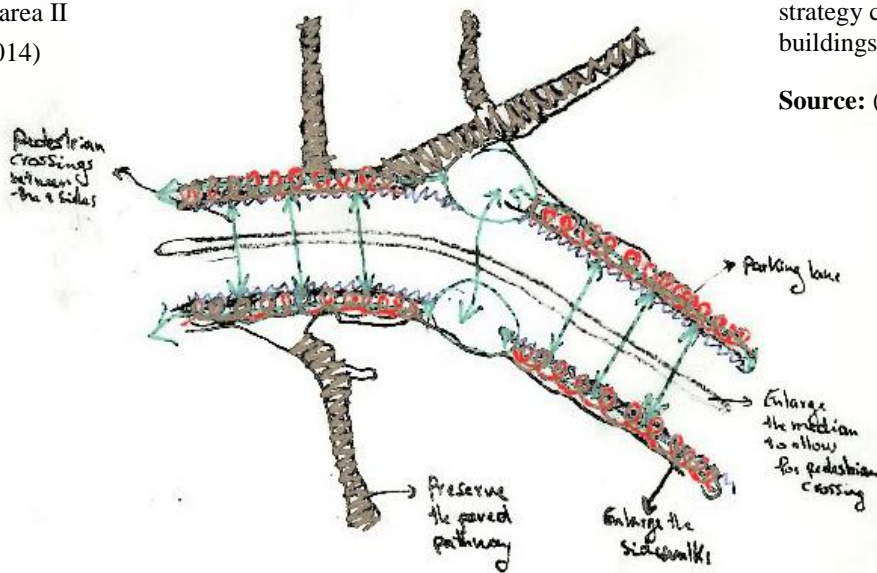


Figure 96. Map showing the streetscape strategy in action area II
Source: (Author, 2014)

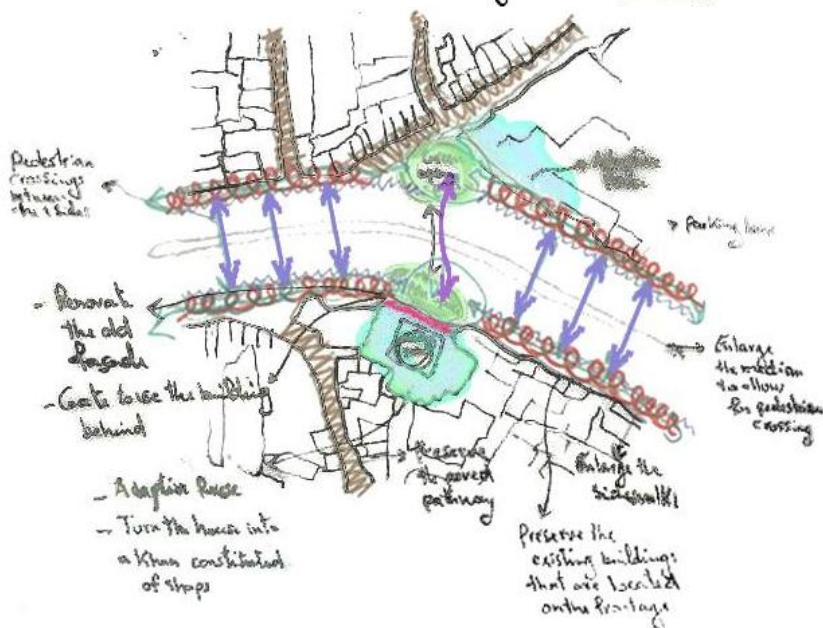


Figure 97. Map showing the streetscape and the buildings strategies in action area II
Source: (Author, 2014)

By applying the integral urbanism elements in this action area, the strategy will enhance the:

- **Hybridity:** by preserving the commercial character of the area when applying adaptive reuse strategy for the old abandoned house to use it as a khan constituted of shops.
- **Connectivity:** by enhancing the pedestrian experience and also by working on the streetscape level, and by enhancing the link between the two open spaces to re-stitch the neighborhood and re-invigorate linkages from before.
- **Porosity:** by injecting open public spaces on the residual spaces resulted from the construction of the boulevard and using the bisected façade as a porous membrane that can work as a gate to the khan behind it, which will foster the pedestrians' relation to places.
- **Authenticity:** First, by preserving and renovating the authentic bisected façade that reflects the character of the residential buildings in this neighborhood and using it to enhance people's relation to place; second, by encouraging adaptive reuse strategy for the abandoned building to turn it into a khan that contains retail shops and also using this strategy to other abandoned buildings on the other side of the boulevard. Scales and materials must be carefully considered to reinforce the unity of emerging public space on both sides of the boulevard.
- **Vulnerability:** by using the already existing elements (residual spaces and bisected buildings) that resulted from the construction of the boulevard and dealing with specificity of these cases in a way that avoids any additional destruction because these resulted elements are appropriated by the residents

in a way that serves their daily needs. Therefore the strategy will only use the unused spaces and buildings to turn them into dynamic spaces, allowing local residents to transform the space progressively according to their available resources and means.



Figure 98. Shows the area before the construction of the boulevard

Source: (Author, 2014)



Figure 99. Shows the area after the construction of the boulevard

Source: (Author, 2014)



Figure 100. Aerial view map of the site where the bisected façade is located

Source: “Aleppo.” Map. *Google Maps*. Google. Web. 2013.



Figure 101. Image showing the bisected façade on the edge of the boulevard

Source: Retrieved 2014 from <http://photo.halabnews.com/>

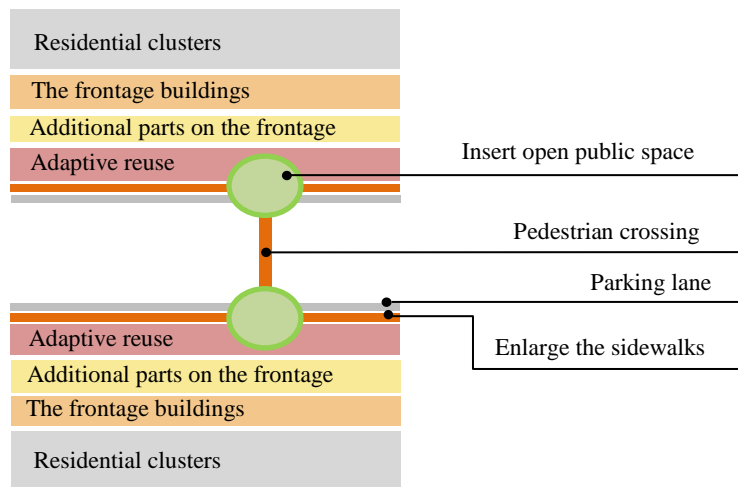
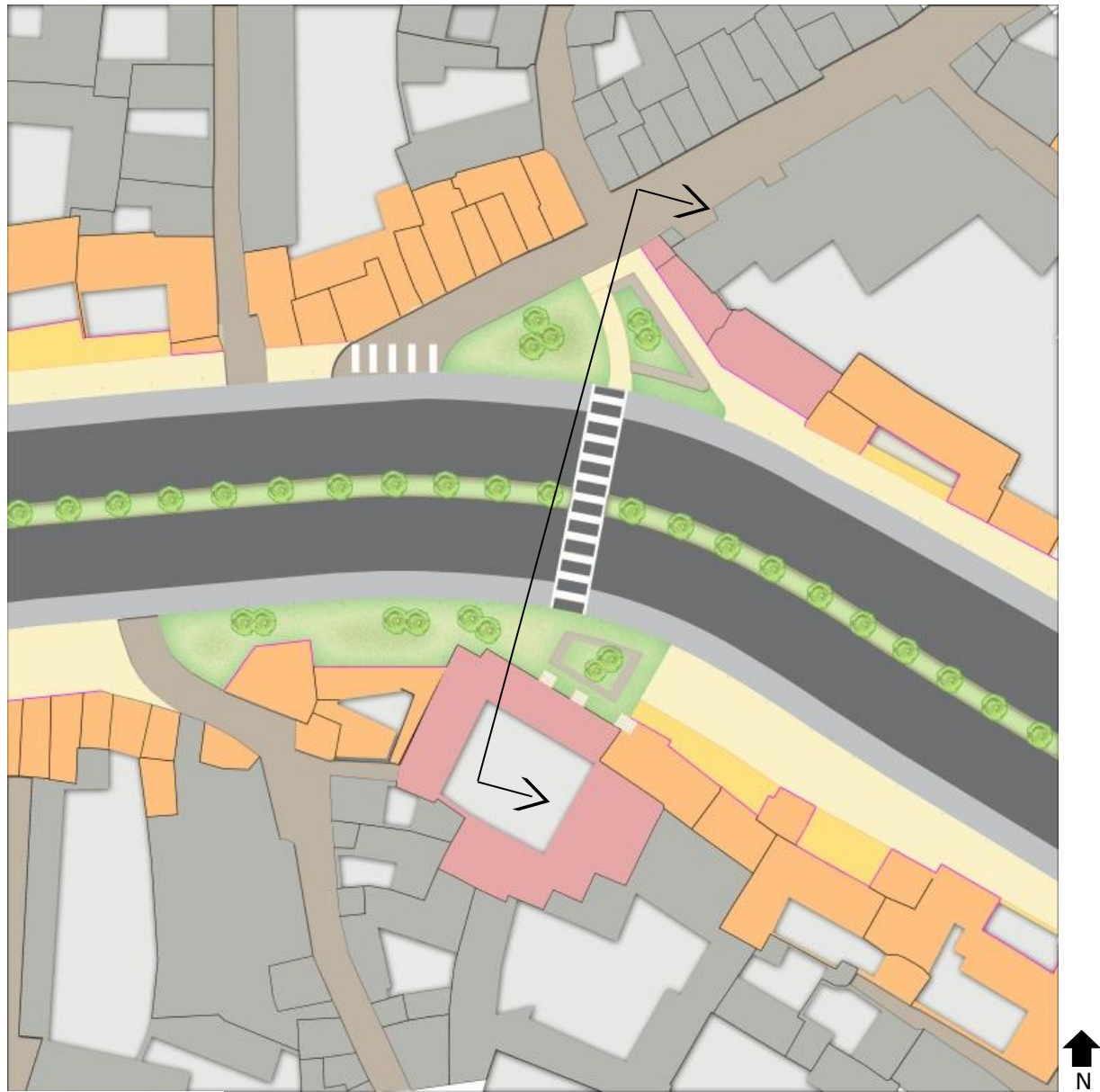


Figure 102. A diagram showing the strategy of the action area II

Source: (Author, 2014)



0 10 20 30 Meters

- | | |
|--|---|
| Adaptive reuse for the existing buildings | Parking lane |
| Existing buildings on the frontage | Sidewalks |
| Residential clusters | Open public spaces |
| | Paved pathways |

Figure 103. Action area plan II

Source: (Author, 2014)

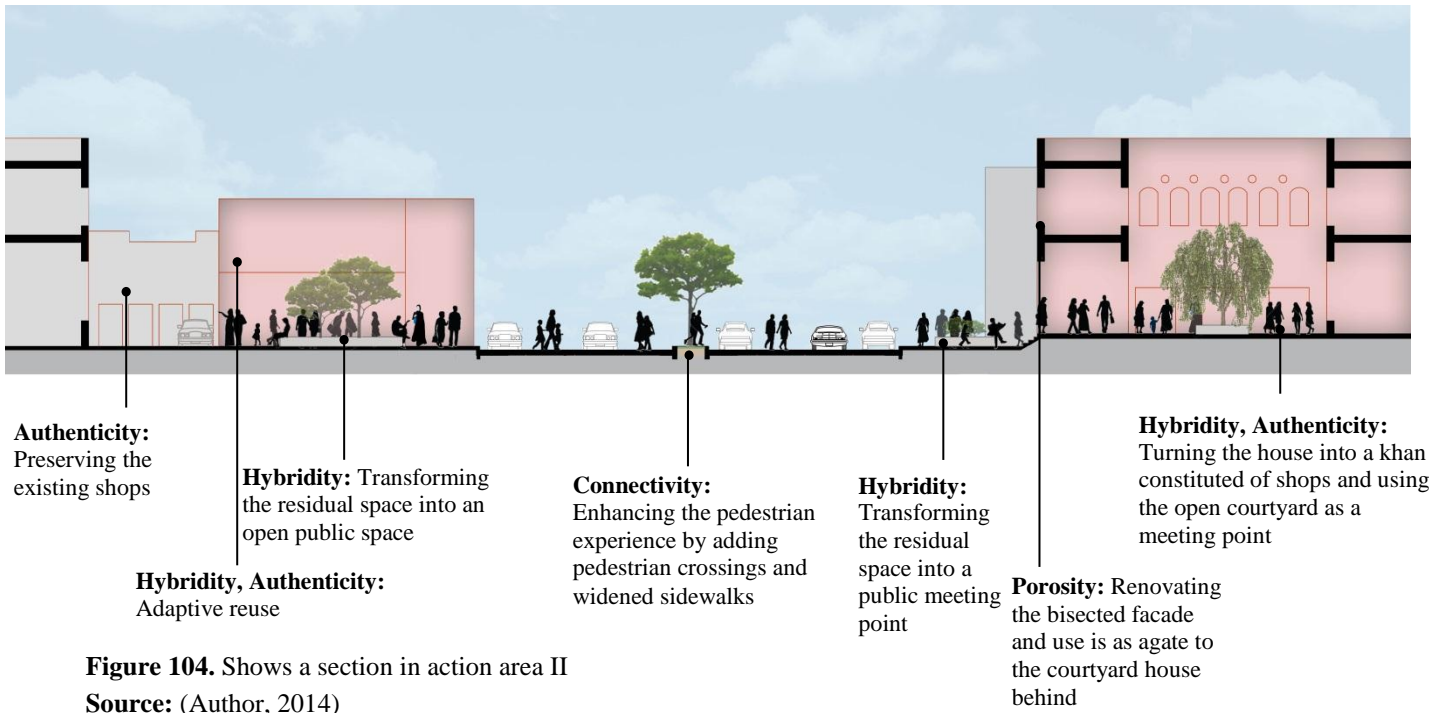


Figure 104. Shows a section in action area II
Source: (Author, 2014)

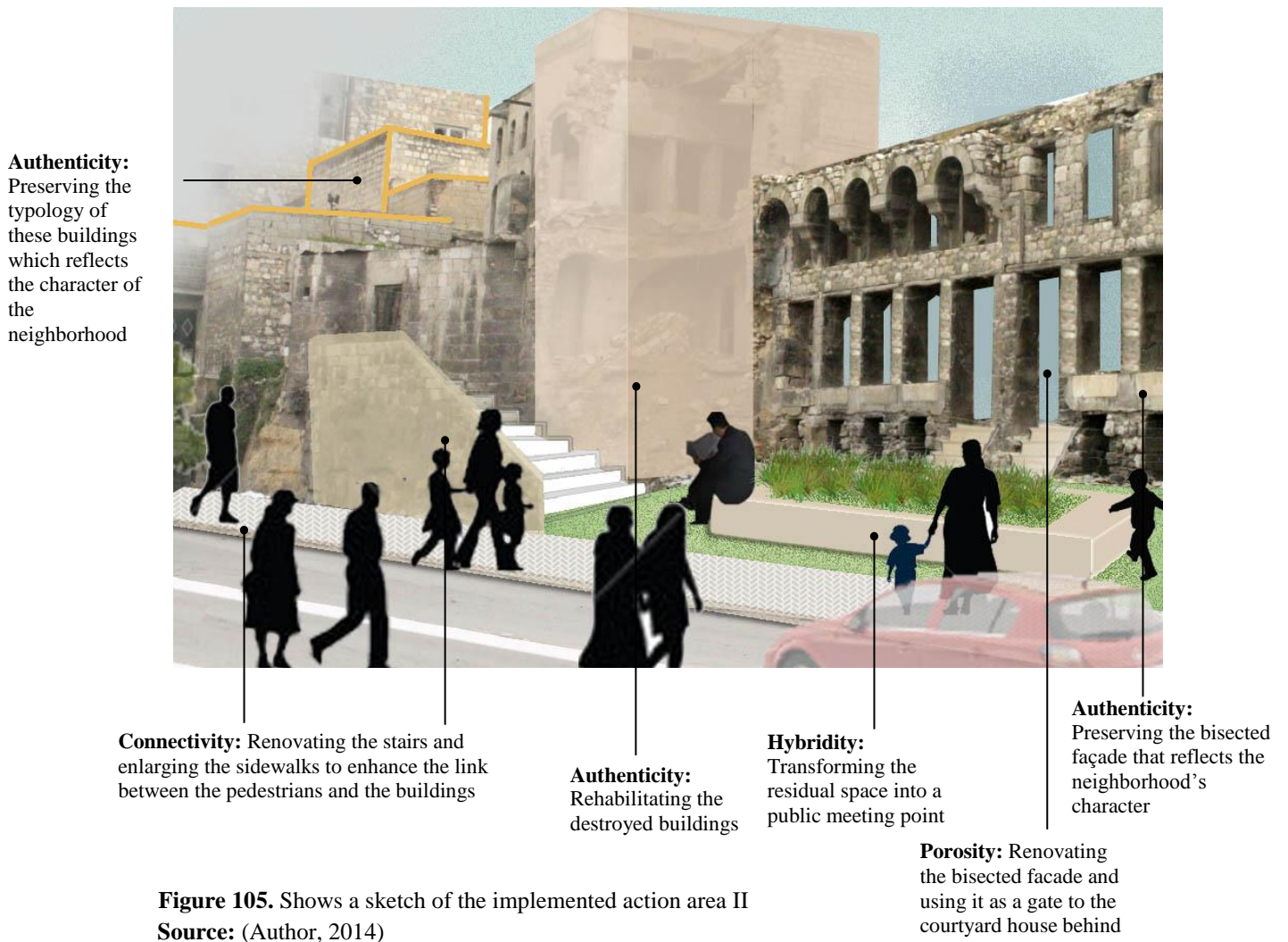


Figure 105. Shows a sketch of the implemented action area II
Source: (Author, 2014)

6.6.3. Action area III (preservation approach)

This area of the boulevard contains public buildings like mosques, khans and hammams. The strategy in this zone will focus on redefining the public space to support the institutional function of the zone, and on a renovation strategy for one of the heritage religious buildings that is partially destroyed because of the war. My aim in this case is to use treatment mechanisms that focus on maintaining the existing parts of the building by supporting the deteriorated structures, keeping the memory and telling the story of the building by preserving its character.

As a part of the streetscape strategy, the intervention includes the upgrading of the public amenities of the streets, the sidewalks, the paving, and the parking lane as a means to complement the strategy that is implemented on the physical structures (Figure 106, 107, 108, 109). The strategy will not be working in a way that deals only with the specificity of the affected facades and open spaces, but will also work as what Ellin calls an “integral system” that focuses on connection and interchange between people and places (Figure 110, 111, 112, 113, 114).

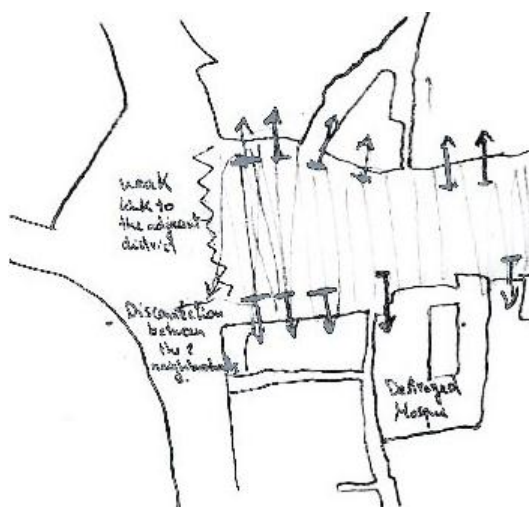


Figure 106. Map showing the existing conditions resulted from the construction of the boulevard in action area III
Source: (Author, 2014)

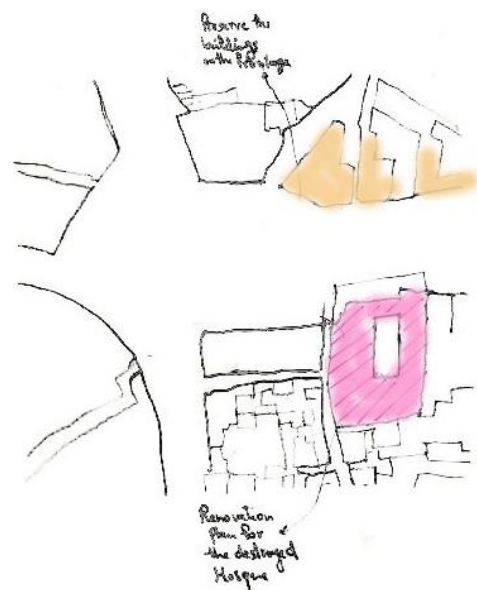


Figure 107. Map showing the strategy concerning the buildings in action area III
Source: (Author, 2014)

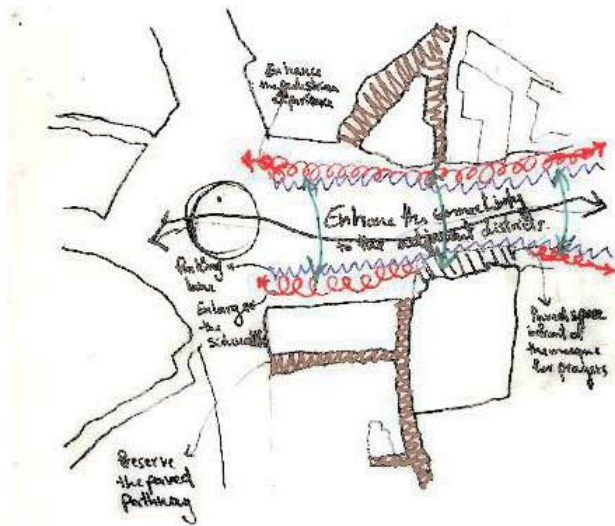


Figure 108. Map showing the streetscape strategy in action area III

Source: (Author, 2014)

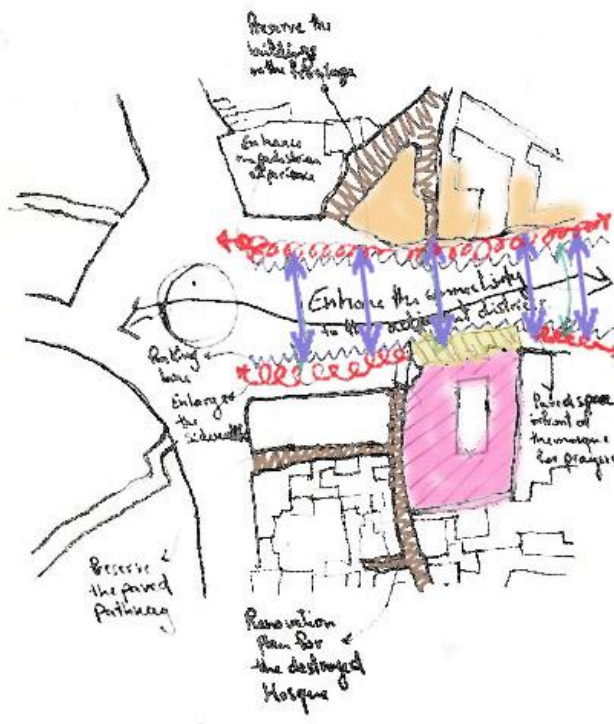


Figure 109. Map showing the streetscape and the buildings strategies in action area III

Source: (Author, 2014)

By applying the integral urbanism elements in this action area, the strategy will enhance the:

- **Hybridity:** by preserving and enhancing the character of this zone as institutional zones constituted of mosques and hammams.
- **Connectivity and Porosity:** by enhancing the pedestrian experience when enlarging the sidewalks and by providing the mosque with a paved space for prayers which will function as a porous layer attached to the mosque.

- Authenticity: by preserving and renovating the destroyed mosque which will help in preserving the character of the area, thus reflecting the interrelation between people and place.
- Vulnerability: by using the already existing elements and dealing with the specificity of these cases when renovating the mosque and turning the streets around it into paved pathways for pedestrians.



Figure 110. Aerial view map of the mosque
Source: “Aleppo.” Map. *Google Maps*. Google. Web. 2013.

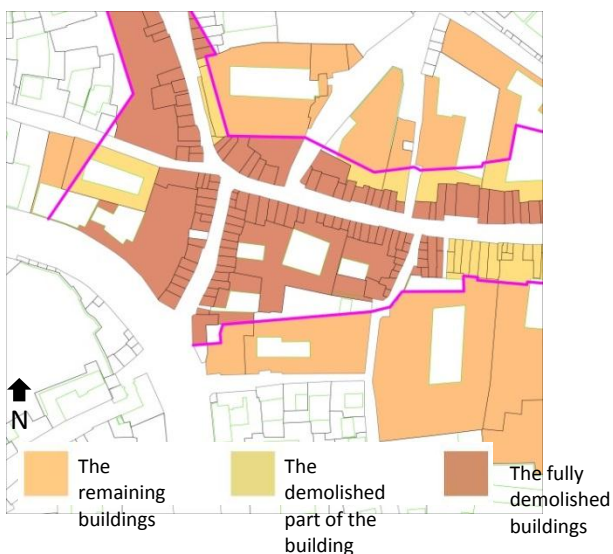


Figure 111. Shows the area before the construction of the boulevard
Source: (Author, 2014)



Figure 112. Shows the area after the construction of the boulevard
Source: (Author, 2014)

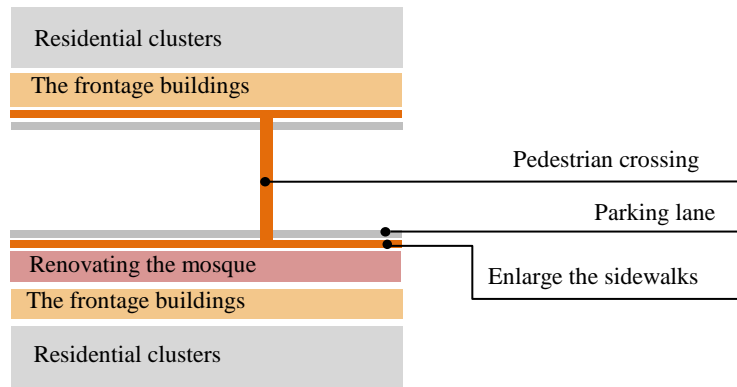


Figure 113. A diagram showing the strategy of the action area III

Source: (Author, 2014)



Figure 114. Action area plan III

Source: (Author, 2014)

Concerning the damaged mosque, particular design strategies should be proposed in order to renovate it and to preserve its character. The proposed study for this case is a reconstitution strategy that will conserve the existing building and add to it some new materials to support its structure. In the following figures, I am exposing the damage that affected the mosque where it caused the fall of the ceiling and the damage to the internal walls of the courtyard in order to propose an appropriate treatment for the exposed case (Figure 115, 116, 117, 118). As this is an important monuments, it will be designated in the strategy as meritous of a special restoration study beyond the concerns of this research.

The destroyed ceiling of the mosque



Figure 115. Image showing an inside view of the destroyed ceiling of the mosque
Source: Retrieved 2014 from <http://ioh7fais.wordpress.com/>



Figure 117. Image showing the destruction of the internal facade
Source: Retrieved 2014 from <http://joh7fais.wordpress.com/>

The destroyed ceiling of the



Figure 116. Image showing the destroyed ceiling of the mosque from the street
Source: Retrieved 2014 from <http://joh7fais.wordpress.com/>



Figure 118. Image showing the internal destruction of the courtyard and the arches
Source: Retrieved 2014 from <http://joh7fais.wordpress.com/>

6.7. Proposed implementation framework

Each case will follow a certain strategy based on the classification of the spatial/functional zoning areas and the physical condition of the building. The conservation strategy will be based on a building-by-building assessment of its historical value and structural conditions.

In order to be able to implement the proposed strategy in this thesis, I assume that post-war reconstruction mechanisms will most probably be led by International Organization and Aleppo's municipality/governor. I recommend a participatory approach to be used in this case in order to open the floor for the different stakeholders to take part in the decision making as this is important to the reconstruction process. My work hopes to contribute to the reconstruction with the collaboration of the International Organization. Dwellers and organizational committees, municipalities and NGOs should be the supervising group for the implementation process. This collaborative plan will target building-by-building in the studied area for assessment, maintenance, conservation and renovation based on each case, working with owners and residents on developing feasible interventions for their buildings. The proposed strategy is meant as a guideline to facilitate dialogue among stakeholders not as a substitute to dealing with them.

CHAPTER 7

CONCLUSION

In this chapter, I will discuss the findings of this study, its limitation and I will conclude with recommendations for future research. In this thesis, I endeavored to understand the history of the case study -the construction of the boulevard of Qadi Askar in the heart of the Old City of Aleppo- and to observe its urban transformation. The theoretical analysis provided an in-depth understanding of the city's layers through the qualities of integral urbanism -Hybridity, Connectivity, Porosity, Authenticity, and Vulnerability- which is explored through reading the city's urban fabric over time. This allowed me to understand various social, economic, and physical conditions before and after the construction of the boulevard, and during the current war. The product was a set of design interventions that fit within the urban context and respect the city's urban transformation and character.

7.1. Research findings

The thesis raised questions that required finding the means of dealing with the built environment as it existed after the construction of the boulevard due to Modernist planning practices. The study sought to devise ways for connecting both sides of the boulevard and also to enhance the link to the surrounding districts. It sought to instigate catalytic actions by proposing interventions that aimed to regenerate the abandoned historic buildings and the exposed courtyards cut by the boulevard. Moreover, it sought to propose a model that can serve post-war reconstruction interventions. The war condition added a layer to the city that contributed to the urban transformation of the area and the city as a whole. It exacerbated the conditions of the area of the boulevard that already was lacking a clear urban and architectural

character. The questions in this thesis were brought to define a process through which the area of the boulevard can be re-generated and revitalized.

The significance of this thesis lies in providing an in depth analysis and proposing urban design interventions on the boulevard and its adjacent frontages. The thesis demonstrated the characteristics of the eastern part of the Old City by using the theory of integral urbanism. The analysis showed the variation of the manifestation of the integral urbanism characteristics in the Old City before and after constructing the boulevard, and the current war.

This thesis focused on demonstrating the site's economic, social, and physical conditions in order to propose designs that can enhance the neighborhood conditions linking special and functional characteristics of the site. Instead of the high rise buildings proposal to the site as a means to enhance the neighborhood's physical quality, the thesis investigated other means for enhancing the neighborhood's conditions and respecting its composition. It aimed at enhancing the public amenities and at bringing people to the abandoned structures in order to engage them in the improvement of their own built landscape.

7.2. Limitation of the study

I was not able to conduct a field visit to the city due to the current war. Instead, in this thesis I depended heavily on the morphological analysis in order to be able to understand the context of the studied area and its relation to the city at large. I also depended on collecting data from books and other research studies for this area of the Old City. This difficulty caused the study to have the following limitations. The first limitation is the inability to make accurate surveys to the area in order to know more about the buildings' conditions. The second limitation is the inability to conduct

interviews with the dwellers of the area in order to learn more about their social and economic circumstances. Third, the site documentation was only based on pictures taken from news websites and other videos online to be able to take images of before and during the war.

7.3. Future research

This thesis has shed light on this neglected part of the old city which can help future studies in conducting further research for this zone and implementing possible recovery and reconstruction schemes. The methods used in this thesis can be used for future treatment to this area and for the other damaged areas from war in the Old City. It is not the plan itself that could be applied to the other sites of the Old City, but the approach that was used in this thesis that can be used for future physical treatments and social reconciliation. How can the understanding of the pre-war urban conditions help to propose plans for post-war reconstruction to the old city? To what extent could the pre-war urban design proposed interventions serve as a starting point for post-war reconstruction? From the understanding of the morphological analysis of the pre-war urban conditions, the thesis sought to push strategic approaches rather than to propose fixed outputs and designs. The strategic intervention needs to be examined with respect to the other parts of the Old City where the proposed intervention could be applied to reconstitute the damaged urban historic core of Aleppo.

BIBLIOGRAPHY

Bianca, S. (2000). *Urban Form in the Arab World: Past and present* (Vol. 46). vdf

Hochschulverlag AG.

Blevins, D. 2013. *An Ambitious Plan to Demolish Northern Ireland's So-Called "peace Walls within a Decade Has Been Announced by Downing Street.*

Retrieved from <http://news.sky.com/>

Bollens, S. A. (2012). *City and Soul in Divided Societies*. Abingdon: Routledge.

Busquets, J. (2005). *Aleppo: Rehabilitation of the Old City: the eighth Veronica*

Rudge Green Prize in Urban Design (Vol. 8). Harvard University Graduate School of Design.

Calame, J., & Charlesworth, E. R. (2009). *Divided Cities: Belfast, Beirut, Jerusalem, Mostar, and Nicosia*. University of Pennsylvania Press.

Carmona, M. (Ed.). (2010). *Public Places, Urban Spaces: the Dimensions of Urban Design*. Routledge.

Ellin, N. (2006). *Integral Urbanism*. New York: Routledge.

Gaube, H., & Wirth, E. (1984). *Aleppo: Historische und geographische Beiträge zur*

Graham, S. (2004). *Cities as Strategic Sites: Place Annihilation and Urban*

Geopolitics. Cities, War, and Terrorism: Towards an Urban Geopolitics, 31-53.

- Gesellschaft für Technische Zusammenarbeit (GmbH), Eschborn = the German Technical Cooperation (GTZ). (1997). *Rehabilitation of the Old City of Aleppo Development Plan*. Aleppo.
- Henderson, D. Mchugh, M. 2013. *Peace Walls in the North to be Torn Down*. Retrieved from <http://www.independent.ie/>
- Khechen, M. (2004). *Spatial Patterns in Transformation: A Rehabilitation Framework for Old Aleppo* (Doctoral dissertation, Harvard University).
- Karazoun, Z., & Davidson, F. (2005). *Key Factors Impacting on the Rehabilitation Process in the Old City of Aleppo*. Erasmus University.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Age International.
- Makas, E. G. (2007). *Representing Competing Identities: Building and Rebuilding in Postwar Mostar, Bosnia-Herzegovina*. (Order No. 3254631, Cornell University). ProQuest Dissertations and Theses, , 521-521 p. Retrieved from <http://search.proquest.com/docview/304860307?accountid=8555>. (304860307).
- Makaš, E. G. (2005). Interpreting multivalent sites: New meanings for Mostar's Old Bridge. *Centropa*, 5, 60-69.
- Marcus, A. (1989). *The Middle East on the Eve of Modernity: Aleppo in the Eighteenth Century*. Columbia University Press.

- Marshall, S. (2004). *Streets and Patterns*. Routledge.
- Matsubara, K. (2008). “The Works of Gyoji Banshoya in the Middle East and North Africa”. *Journal of City Planning Institute of Japan*, 43(3), 163-168.
- Moudon, A. V. (1997), *Urban Morphology as an Emerging Interdisciplinary Field*.
University of Washington, Seattle, WA 98195, USA.
- Møystad, O. (1998). “Morphogenesis of the Beirut Green-Line: Theoretical Approaches Between Architecture and Geography (note)”. *Cahiers de géographie du Québec*, 42(117), 421-435.
- Nakabayashi, I. (1989). Urban Structure of Islamic City and Its Modern Transformation: a Case Study of Aleppo, Syria.
- Neglia, G. A. (2009). *Aleppo : Processi di Formazione Della Citta Medievale Islamica = Processes of Formation of the Medieval Islamic City* . Bari : Poliba Press.
- Raymond, A. (1998). *La ville arabe, Alep, á l'époque ottomane (XVIe-XVIIIe siècles)* (Vol. 171). Institut français de Damas.
- Report Belfast Interface project Annual Report October 7th 2011- December 7th 2012.
- ROĞLU, E. A. M. (2005). *The Transformation of Urban Space at the Conjunction of the Old and New Districts: The City of Aleppo* (Doctoral dissertation, MIDDLE EAST TECHNICAL UNIVERSITY).

The Conservation of the Old City of Aleppo. Unesco, 1980.

Sauvaget, J. (1941). *Alep: essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXe siècle*. Texte (Vol. 1). P. Geuthner.

The News Letter.(2013, June 4).10 Year Deadline for Removing Peace Walls

"Ambitious". *The News Letter*. Retrieved from <http://www.newsletter.co.uk/>

Terao, m. (1995). Traditional Structure of the old city, Aleppo: the multiple composition and the vertical articulation of the urban community in

Aleppo. *keio economic studies*, 32(1), 77-104.

Unesco (2011). Report of Intergovernmental Committee of Experts (Unesco HQ, 25-

27 May 2011). Retrieved from <http://whc.unesco.org/en/activities/638>

Vincent, L. H. (2004). *When Home Becomes World Heritage: the Case of Aleppo,*

Syria (Doctoral dissertation, Massachusetts Institute of Technology).