



Ain Shams University  
Cairo



University of Stuttgart  
Germany

# Re-thinking the Vibrant life on the Sidewalk: Mapping the Spatial Relations of Informal Practices on Cairo sidewalks

The Case of Haroun Al-Rashid and Alexandria Streets,  
Heliopolis, Cairo

**A Thesis submitted in Partial Fulfillment of the Requirement for the Degree of  
Master of Science in Integrated Urbanism and Sustainable Design**

by  
**Salsabil Fahmy**

Supervised by

**Prof. Dr. Mohamed Salheen**  
Professor of Integrated  
Planning and Design  
Ain Shams University

**Prof. Dr. Johann Jessen**  
Professor of Urban & Regional  
Planning  
University of Stuttgart

**Assoc. Prof. Magda Mostafa**  
Associate Professor of  
Architecture  
American University in Cairo

January 2018





# Re-thinking the Vibrant life on the Sidewalk: Mapping the Spatial Relations of Informal Practices on Cairo sidewalks

The Case of Haroun Al-Rashid and Alexandria Streets,  
Heliopolis, Cairo

A Thesis submitted in Partial Fulfillment of the Requirement for the Degree of Master  
of Science in Integrated Urbanism and Sustainable Design

By **Salsabil Fahmy**

Supervised by

Prof. Dr. Mohamed Salheen  
Professor of Integrated Planning  
and Design  
Ain Shams University

Prof. Dr. Johann Jessen  
Professor of Urban & Regional  
Planning  
University of Stuttgart

Assoc. Prof. Magda Mostafa  
Associate Professor of  
Architecture  
American University in Cairo

External Committee

Signature

Prof. (external examiner)  
Professor of (....)  
University of (....)

Prof. (Title/Name)  
Professor of (....)  
University of (....)

Prof. (Title/Name)  
Professor of (....)  
University of (....)

Prof. (Title/Name)  
Professor of (....)  
University of (....)



Ain Shams University  
Cairo



University of Stuttgart  
Germany

24/01/2018



# Disclaimer

This dissertation is submitted to Ain Shams University (ASU) and University of Stuttgart - Faculty of Architecture and Urban Planning (USTUTT) for the degree of Integrated Urbanism and Sustainable Design (IUSD), in accordance to IUSD-ASU regulations.

The author carried out the work included in this thesis during the period from August 2017 - Jan 2018.

The author confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

Any disputes regarding the copy right of the content is the sole responsibility of the author.

Ain Shams University holds the right to publicly distribute this thesis in the current university standard format. The author holds the right to publish the content in any other format.

01/24/2018

Salsabil Fahmy

Signature



## Acknowledgements

I would like to express my gratitude to many people. First, and mostly, I would like to express my sincere gratitude to my family and my husband, for **encouraging me to pursue my master's** degree, and their support along the way.

I would specially like to thank my mother whom without her support to me with my two kids, it would have been impossible for me to finish my degree. I am forever grateful to her endless encouragement to me through the difficult times, and her endless love and care to my kids and me.

I would also like to express my gratefulness to my supervisors: Prof. Mohamed Salheen, Prof. Johann Jessen and Dr. Magda Mostafa, for their guidance and fruitful feedbacks.

My lovely kids, Amena and Amr, thank you for being an important part in this journey, despite all the difficulties and challenges that I had to undergo, I **wouldn't have been eager to pursue my degree without your love in my life.**

Last but not least, I would like to express my appreciation to the IUSD staff in University of Stuttgart and Ain Shams University, and the DAAD, for giving **me this opportunity to do my master's degree, and for their understanding** when I needed their support.





## Abstract

Informality in Cairo is most of the time addressed either in the context of informal settlements or sometimes on informal economy/street vendors. However, informality is rarely **addressed in the way it affects people's everyday** life through forms of informal practices on the sidewalk spaces of *formal* and *informal* neighborhoods. The everyday informal practices are in most cases enclosed in the public space of the sidewalks, interfering with the pedestrian **paths and ground floors' activities and shops** in the form of territorial appropriations. The role of daily informal practices on Cairo Sidewalks can extend beyond generating spaces of conflicts and negotiations, where their investigation/study can lead to possible planning actions by corresponding to the needs of the community.

The main aim of this research is to provide a comprehensive and an in-depth investigation of the spatial manifestation of informal practices within the micro-universe of the sidewalk in order to develop a better understanding of how sidewalks can be managed and designed in a more effective way to fit the needs of the community. The aim of the researcher is to suggest new and comprehensive investigation tools and to set a base for proposing possible planning actions. Chapter 2 and 3, respectively, aimed at reviewing the related literature with the objective of contextualizing the phenomenon of informal practices on Cairo sidewalks, as well as understanding and tracking the development of the phenomenon in Cairo. Chapter 4 and 5 presents a more focused scope on the data collection methods and the primary findings from the fieldwork on the selected case studies. The case study analysis was undergone on two streets in Heliopolis: Haroun Al-Rashid and Alexandria Streets. The last two chapters includes the analysis and understanding of the factors, principles, motives, and perceptions towards the phenomenon, ending the research with recommending to re-adjust the policies concerning the sidewalk use, and to use comprehensive and interactive tools of investigation for similar studies.

**Keywords:** Informal practices; Sidewalk; Informality; Public Spaces; Formal neighborhood; territoriality; territorial behavior.

# Table of Contents

Table of Contents .....	1
List of Figures .....	3
List of Tables.....	9
Definitions and Translations .....	10
Chapter 1 .....	12
1 Introduction .....	13
1.1 Framing of the Research Problem .....	13
1.2 Hypothesis .....	14
1.3 Research Objectives.....	14
1.4 Research Questions.....	15
1.5 Research Methodology .....	16
Chapter 2 .....	19
2 Literature Review .....	20
2.1 Introduction .....	20
2.2 Sidewalks as the main public Spaces of the City.....	20
2.2.1 Defining Public Space.....	20
2.2.2 Significance of Streets.....	21
2.2.3 Significance of Sidewalks .....	22
2.3 Everyday Social Behavior in Public Spaces.....	26
2.3.1 Theory of Place .....	26
2.3.2 Activity Patterns .....	28
2.3.3 Territorial behavior in Public Space .....	28
2.4 Images and Meanings of the Street .....	30
2.4.1 Definition of Environmental perception .....	31
2.4.2 Lynch's <i>Image of the City</i> .....	32
2.5 Conclusion .....	33
Chapter 3.....	35
3 The Case of Cairo .....	36
3.1 Brief Historical background on Islamic Streets .....	36
3.2 Valuable public space in historic Cairo: The Alley .....	37
3.3 How can we define informal practices on Cairo's Sidewalks today? .....	41
Chapter 4.....	47
4 The Fieldwork .....	48
4.1 Site Selection.....	48
4.2 Data Collection Tools.....	51
4.2.1 Mapping Reality .....	53
4.2.1.1 The Invisible Observer: Video Recording.....	53
4.2.1.2 Geo-tagged Photography .....	55
4.2.1.3 Initial Notations-Sketches .....	55
4.2.1.4 Coding and counting .....	55
4.2.1.5 Interviews.....	56
4.2.2 Mapping Perception .....	58
4.2.2.1 Online Survey .....	59
4.2.2.2 Cognitive mapping.....	59
Chapter 5.....	61
5 Data and Primary Findings.....	62
5.1 Site Analysis .....	62

5.1.1 Brief historical background- Heliopolis urban Development .....	62
5.1.2 Case Studies: Haroun Al-Rashid and Alexandria Streets .....	77
5.4 Patterns of uses: Mixed-Used Sidewalks .....	82
Chapter 6.....	91
6 The Unmapped Dynamics: Behind the Maps.....	92
6.1 Understanding the root causes.....	92
6.1.1 Understanding the impact of adequate sidewalk space .....	92
6.1.2 Understanding the Space-time factor.....	119
6.1.3 Understanding the impact of Active and Passive Facades .....	130
6.1.4 Understanding the impact of the Edge effect .....	136
6.1.5 Understanding the Impact of the Multiplier Effect.....	141
6.2 Conflicts over use of Sidewalk .....	149
6.3 Reflection .....	163
Chapter 7.....	167
7 Conclusion and Recommendations.....	168
7.1 Conclusion .....	168
7.2 Recommendations.....	171
7.3 Challenges.....	173
7.4 Further Research .....	174
References .....	175
Bibliography.....	180
Appendices .....	182

## List of Figures

Figure 1 - Initial understanding of the basic typologies of informal practices on Sidewalks of Cairo. Source: Author .....	14
Figure 2 - Defining the scope of the research- Spatial Dimension. Source: Author .....	15
Figure 3 - Research Methodology. Source: Author .....	16
Figure 4 - At certain points, businesses furnished the street to create an inviting gathering space (Mehta, 2013, p. 112) .....	25
Figure 5 - At several locations wide tree-covered sidewalks with benches enable people to gather (Mehta, 2013, p. 112) .....	25
Figure 6 - A conceptual diagram for the components of place (Canter, 1977) .....	27
Figure 7 - Components of Sense of Place (Punter, 1991) .....	27
Figure 8 - Components of Sense of place (Montgomery, 1998) .....	27
Figure 9 The internal structure of Fatimid Al-Qahira. (Alsayyad,1981) .....	36
Figure 10 Haretal-Darbal- Asfar, a typical Cairene harah defined by the <b>surrounding continuity of houses: “A path closed by masonry.”</b> (AbdelMonem, 2012, p.40) .....	38
Figure 11 - Human-product conflict in the alleys. The flow of products through the alleys during the day sometimes interrupts human traffic. (AbdelMonem, 2012, p.43) .....	39
Figure 12 - Typical section of a Cairene Alley, showing a multi-layered arrangement of social interaction at higher levels, while public traffic dominates at the ground level. (AbdelMonem, 2012, p.43) .....	39
Figure 13 - <b>Photo of Sidewalk café in the Place De L’Opera in Cairo, 1910.</b> (Epstein, 2013) .....	43
Figure 14 - Figure 14 Selling Soft Drinks, 1910 (Epstein, 2013) .....	43
Figure 15 - Hanging Laundry in Cairo streets (Epstein,2013) .....	44
Figure 16 - Men Walking down a street in Cairo, 1910 (Epstein,2013) .....	44
Figure 17 - bustling street in Old Cairo, 1934 (Qin, Zin, 2016) .....	45
Figure 18 - Cairo Street Scene, 1942(Usbpanasonic, 2013) .....	45
Figure 19 - Matrix identifying the Criteria for the selection of Case Studies. Source: author .....	49
Figure 20 - Map of Heliopolis showing the streets proposed for the selection Source: Author .....	50
Figure 21- describing the data collection methods Source: Author .....	52
Figure 22 - highlighting the path of the video-recorded walks on the Haroun Al-Rashid and Alexandria sidewalks Source: Author .....	54
Figure 23 - Number of users interviewed in each typology of informal practice Source: Author .....	57

Figure 24 The initial project layout in the form of two Oases (Ilbert, 1981, p.61) .....	63
Figure 25 The city Heliopolis General Plan, 1930 Source (Ilbert, 1981. P 69) .....	63
Figure 26 On the left, plot divisions in the elite neighborhood, on the right, plot division of the indigenous neighborhood (AbdelAziz, 2007) .....	64
Figure 27 - The zoning of the different social classes in Heliopolis (AbdelAziz, 2007) .....	65
Figure 28 - Entrance to Rue San Stefano (Haroun Al-Rashid St. today), 1931 Source: <a href="http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html">http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html</a> .....	66
Figure 29 - San Stefano Street (Haroun Al-Rashid St. today) Source: <a href="http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html">http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html</a> .....	66
Figure 30 - Commercial activities in the Monarchy Era (1905-1952) (Ain Shams University, 2015) .....	68
Figure 31- Commercial activities in Nasser Era (1952-1970) (Ain Shams University, 2015) .....	68
Figure 32 - <b>Commercial activities in Mubarak's era (Ain Shams University, 2015)</b> .....	69
Figure 33 - Increase in density of commercial activities in Heliopolis, from 1973 to 1999 (AbdelAziz, 2007) .....	69
Figure 34 Covered Market Building in <i>Midan Al-Gamea</i> (IFE, 2005) .....	71
Figure 35 Area of covered Mosque today. Source: Author .....	71
Figure 36 - The Mosque Square, 1910 (Usbpanasonic, 2013) .....	72
Figure 37 - Gamal Al-Din Al-Afghany Mosque (Dobrowolska & Dobrowolski, 2006) .....	72
Figure 38 - Rue San Stefano, 1911. (Rafaat, 1997) .....	73
Figure 39 - Rue San Stefano (Usbpanasonic, 2013) .....	74
Figure 40 - A building in Midan Al-Gamea in 2007 (AbdelAziz, 2007) .....	74
Figure 41 - Small kiosk in Heliopolis, 1953 (Church) .....	75
Figure 42 - Street vendors in Heliopolis (Church) .....	75
Figure 43 –Vendor from the village in the streets of Heliopolis (Church) .....	76
Figure 44 (Church) .....	76
Figure 45 - Bustan Zone: highlighting the case studies- Haroun Al-Rashid & Alexandria St. Source: Author .....	79
Figure 46 - Zooming in to the two case studies: haroun al-Rashid Street and Alexandria Street Source: Author .....	79
Figure 47 - Haroun Al-Rashid Street Today Source: Author .....	81
Figure 48 - Alexandria Street Today Source: Author .....	81

Figure 49 –Categorization of typologies Informal Practices Source: Author .	84
Figure 50 location of permanent & stationary informal practices on the sidewalks of Haroun Al-Rashid and Alexandria Streets. Source: Author -	89
Figure 51 Zoom-in map showing the location of typologies around on block. Source: Author.....	90
Figure 52 The three identified zones on the sidewalks of Haroun Al-Rashid St. Source: Author.....	94
Figure 53 No clear zoning identified on the sidewalks of Alexandria St. Source: Author .....	95
Figure 54 Grocery vendor in zone 3, Haroun Al-Rashid Sidewalks. Source: Author .....	97
Figure 55 Separate chairs in zone 3, Haroun Al-Rashid sidewalks. Source: Author .....	97
Figure 56 Temporary located vendors off the sidewalks of Alexandria St. Source: Author....	97
Figure 57 Extension of shops blocks the movement on sidewalks of Alexandria St. Source: Author .....	97
Figure 58 Real Boundaries of the sidewalks of Haroun Al-Rashid and Alexandria St. Source: Author.....	98
Figure 59 - Abstract illustration on map, showing the difference in pedestrian movement on both sidewalks: Haroun al-Rashid and Alexandria sidewalks Source: Author .....	99
Figure 60 percentages of areas consumed by each typology on Haroun Al- Rashid sidewalks. Source: Author .....	101
Figure 61 percentages of areas consumed by each typology on Alexandria Sidewalks. Source: author .....	101
Figure 62 Extension of shops in zone 1, Haroun Al-Rashid sidewalks. Source: Author .....	102
Figure 63 Extension of workshop on sidewalks of Haroun Al-Rashid St. Source: Author.....	102
Figure 64 Cross-section showing the tangible boundaries of the bakery shop in Alexandria St. Source: Author.....	105
Figure 65 Tangible boundaries of bakery shop on the sidewalks of Haroun Al- Rashid St. Source: Author .....	105
Figure 66 tangible boundaries of shops by placing the chairs of owners in zone 3 Source: Author.....	106
Figure 67 tangible boundaries of shops by placing their watercoolers in zone 3, Haroun Al-Rashid sidewalks. Source: Author .....	107
Figure 68 Types of watercoolers on the sidewalks of Haroun Al-Rashid sidewalks .....	107
Figure 69 Shop owners displaying mattresses on their parked cars in front of their shops. Source: Author .....	108

Figure 70 the arrangement of tiles on the sidewalks of Alexandria & Haroun Al-Rashid St. Source: Author .....	109
Figure 71 Homogeneous finishing of the sidewalks of Haroun Al-Rashid St. Source: Author.....	110
Figure 72 Different tiles used on the sidewalks of Alexandria St. Source: Author.....	110
Figure 73 Users marking their territories according to the dimensions of tiles on Haroun Al-Rashid sidewalks, Source: Author .....	112
Figure 74 Products displayed on the sidewalks respecting the boundaries marked by tiles. Source: Author.....	Figure 75 separate chairs territory marked by floor tiles on Haroun Al-Rashid sidewalk. Source: Author ... 113
Figure 76 Shop painting the adjacent sidewalk space in Haroun Al-Rashid St. Source: Author.....	114
Figure 77 A typical spatial arrangement of informal practices on Haroun Al-Rashid sidewalks. Diagram shows the high level of personalization by users of informal practices. Source: Author .....	117
Figure 78 A typical spatial arrangement of informal practices on Alexandria sidewalks. Diagram shows weak connection between users of informal practices. Source: Author .....	118
Figure 79 Result of the interview conducted with users of informal practices. <b>Question: “How long have you been staying here?”</b> .....	119
Figure 80 results of the interview with users of informal practices. <b>Question: “How frequent does this activity take place?”</b> .....	119
Figure 81 duration of stay of informal practices in both streets. Results from interviews with users of informal practices .....	122
Figure 82 results from the interviews conducted with users of informal practices. <b>Question: “how do you define your territory?”</b> .....	122
Figure 83 Space-time diagram of informal practices on Haroun Al-Rashid sidewalks. X-axis presents the sidewalk space & Y-Axis presenting time. Source: Author.....	123
Figure 84 Space-time diagram of informal practices on Alexandria sidewalks. X-axis presents the sidewalk space & Y-Axis presenting time. Source: Author.....	125
Figure 85 Maximum area consumed by each typology in Alexandria Sidewalks Source: Author.....	127
Figure 86 Maximum area consumed by each typology in Haroun Al-Rashid sidewalks. Source: Author .....	127
Figure 87 Parked motorcycles on & off the sidewalks of Alexandria St. Source: Author .....	128
Figure 88 Examples of malfunctioning objects on the sidewalks of Alexandria St. Source: Author .....	129



Figure 89 – Left: percentage of area consumed by each category on the sidewalks of Haroun Al-Rashid St.. Right: pedestrian vs. non-pedestrian consumed areas on Haroun Al-Rashid Sidewalks.....	131
Figure 90- Left: percentage of area consumed by each category on the sidewalks of Alexandria St.. Right: pedestrian vs. non-pedestrian consumed areas on Alexandria Sidewalks .....	131
Figure 91 Active facades (Gehl, 2010) .....	132
Figure 92 friendly facades (Gehl, 2010) .....	132
Figure 93 Mixture of facades (Gehl, 2010).....	132
Figure 94 boring facades (Gehl, 2010) .....	132
Figure 95 inactive facades (Gehl,2010) .....	132
Figure 96 On the left: Boring facades in Alexandria St. Source: Author. On the right: Active facades in Haroun Al-Rashid St. Source: Author .....	133
Figure 97 On the left: Inactive facades in Alexandria St. On the right: Active facades in Haroun Al-Rashid St. Source: Author .....	134
Figure 98 - this map, the solid white illuminated circles represent the existence of more than 4 practices on the sidewalk, while the more translucent circles represent the existence of maximum two practices in this zone of the sidewalk. The red color marks the active facades .....	134
Figure 99 On the left: Garbage bins on Haroun Al-Rashid sidewalks. On the right: Garbage thrown on the sidewalks of Alexandria St. Source: Author .....	136
Figure 100 location of chairs of shop owners/salesmen on both sidewalks. Impact of the edge effect on spatial arrangement of movable furniture Source: Author.....	138
Figure 101 Impact of edge effect on the location of movable furniture throughout the day on both sidewalks. Source: Author .....	139
Figure 102 Examples of informal practices accumulated around the Mosque (one of the magnets). Source: Author .....	142
Figure 103 impact of the multiplier effect on the accumulation of informal practices on both sidewalks. The red circles represents the magnets and their zones of influence around them Source: Author .....	142
Figure 104 shoe-polishing worker allocating himself daily in front of the Qahwa in Haroun Al-Rashid St. Source: Author .....	143
Figure 105 Carpet vendor & mobile vendor allocating themselves around GAD restaurant daily. Source: Author .....	144
Figure 106 On the left: Foul cart located in the same place every day. Right: Grovery vendor sharing territory with foul cart on specific days. Source: Author.....	145
Figure 107 the use of the sidewalk space of Haroun Al-Rashid on weekday vs. Friday. Source: Author .....	147

Figure 108 cognitive map drawn by a 50 years old shop owner in Haroun Al-Rashid St. S.....	150
Figure 109 On the left: cognitive map drawn by 25 years old female, describing the image of Haroun Al-Rashid sidewalks . On the right: Map drawn by a 60 year old lady, describing the life on Alexandria sidewalks.....	151
<b>Figure 110 Results of online survey: Question: ‘Do you have to pass through the street during your walk?’</b> .....	153
<b>Figure 111 Results of online survey. Question: “How would you describe your walk on the sidewalks of Midan Al-Gamea?”</b> .....	153
<b>Figure 112 Results of online survey. Question:” What first comes to your mind when thinking about the sidewalks of Midan Al-Gamea?”</b> .....	154
<b>Figure 113 Results of online survey. Question: “what kind of practices would you like to maintain on the sidewalks?”</b> .....	154
Figure 114 Cognitive map drawn by a 30 years old lady, who lives in Heliopolis. It describes the life on the sidewalks of Haroun Al-Rashid..	155
Figure 115 Results of interviews conducted with users of informal practices. The chart presents the choice of location on the sidewalks. ....	156
Figure 116 - . On the left: Cognitive map drawn by 18 years old girl, describing the image of haroun Al-Rashid sidewalks. On the right: same person describes Alexandria sidewalks .....	158
Figure 117 - on the left: cognitive map drawn by a 35 years old man, describing Haroun Al-Rashid sidewalks. On the right: Same person draws the image of the sidewalks of Alexandria St. ....	158

## List of Tables

Table 1 Calculating the maximum areas consumed by each typology Source: Author .....	85
Table 2 Duration & location of stay of informal practices on the sidewalks of Haroun Al-Rashid St. Source: Author .....	87
Table 3 Duration & location of stay of informal practices on the sidewalks of Alex St. Source: Author .....	88

## Definitions and Translations

The Mosque Square *Midan Al- Gamea*: ميدان الجامع

Haroun al-Rashid St. شارع هارون الرشيد

Alexandria St. شارع اسكندرية

Oriental coffee shop (Qahwa-Qahawy) قهوة/ قهاوي

Municipality البلدية

Al-Bustan Zone شياخة البستان







# Chapter 1

# 1 Introduction

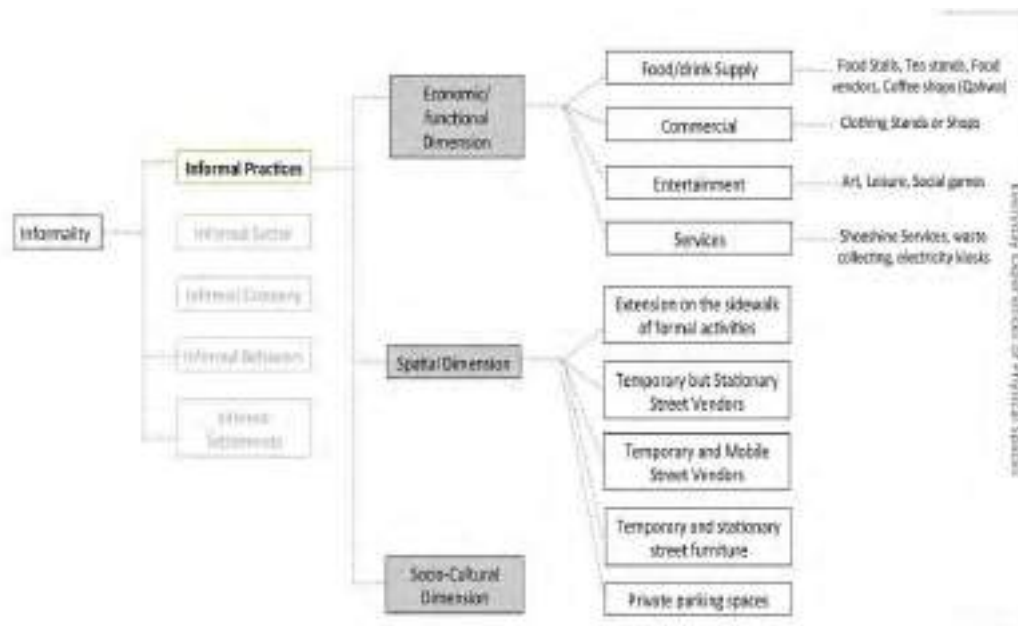
## 1.1 Framing of the Research Problem

The current urban condition in Cairo has been going through various transformations on the macro and the micro scales of the city; ranging from the phenomenon of informal housing on the larger scale to informal practices in public spaces on the smaller scale. Informality is a broad and complex term describing practices on the urban, social, economical, cultural, and political levels. In Cairo, informal urban interventions take place not only in *informal* settlements, but also in many of **Cairo's public open** spaces and streets of *formal* neighborhoods.

Informality in Cairo is most of the time addressed either in the context of informal settlements or informal economy/street vendors. Therefore, in this research, the aim is to discuss informality in the way it **affects people's everyday** life through forms of informal practices in public spaces of *formal* neighborhoods, where there is a strong juxtaposition between *formal* and *informal*, which **wasn't addressed before**. These practices refer to the informal invasion of sidewalks and streets. For example: the extension of some shops and cafes outside their boundaries, temporary street vendors (stationary or mobile), food stalls, tea stands, or private parking spaces on sidewalks. These informal practices; whether perceived as socio-cultural practices and/or micro-economic activities, have been always familiar **in Cairo's public spaces; in** *formal* and *informal* districts.

The everyday informal practices are in most cases enclosed in the public **space of the sidewalks, interfering with the pedestrian paths and ground floors'** activities and shops. These practices mostly appear in the form of territorial appropriation of sidewalks, **where their existence directly affects every citizen's** daily life through a pattern of repetitive behaviors and spatial interactions. In this way, some people decide to use the sidewalks in their own different way, other than its intended use (or initial purpose). The demand behind these practices can be either spatial, social, economical/functional, or cultural, where users mark their territories accordingly (See fig. 01). However, there is a lack of

in-depth investigation of the understanding of this phenomenon, which arouses negotiations and conflicts over the use of the sidewalks.



**Figure 1 - Initial understanding of the basic typologies of informal practices on Sidewalks of Cairo.**  
Source: Author

## 1.2 Hypothesis

The role of daily informal practices on Cairo Sidewalks can extend beyond generating spaces of conflicts and negotiations, where their investigation/study can lead to possible planning actions by corresponding to the needs of the community.

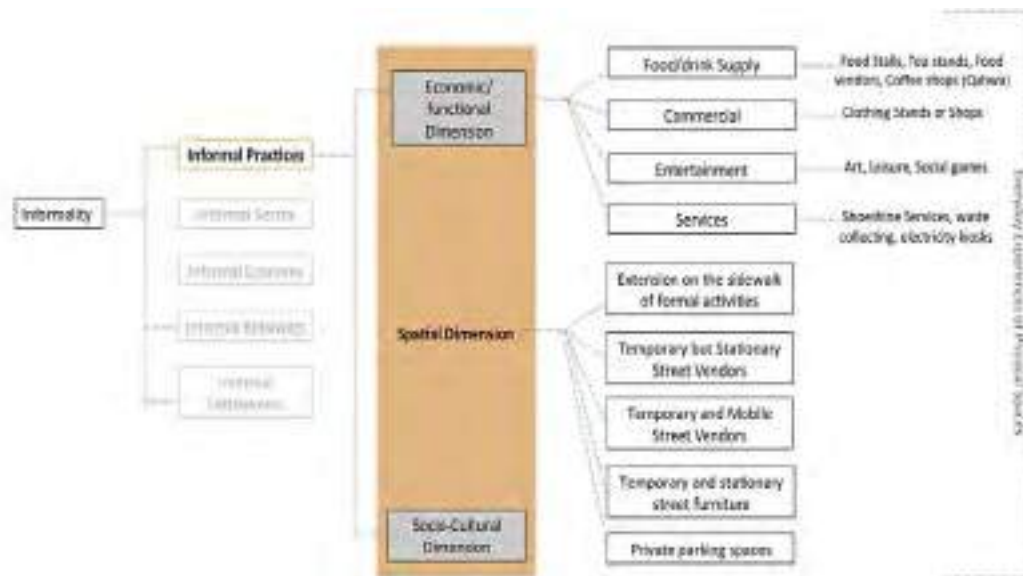
## 1.3 Research Objectives

The objective of this research is to examine the spatial dimension of informal practices within the micro-universe of the sidewalks, which might reveal important information about how people use spaces, their daily needs and possible planning actions, thus suggesting a new tool of investigation. The aim is to focus on the spatial typology/dimension of informal practices, in which the socio-culture and the economic/functional dimensions are embedded within. In other words, the focus is on the spatial manifestation of these practices on the Sidewalks, and the way they interact with the physical space of the sidewalk (See fig. 02)

The bigger objective is to develop a better understanding of how sidewalks can be managed in a more effective, inclusive, and diverse way. The underlying



objective of the study is to aid policymaking, planning, and design processes in modifying existing sidewalks such that they are able to better afford the needs of the community



**Figure 2 - Defining the scope of the research- Spatial Dimension. Source: Author**

## 1.4 Research Questions

- What are the principles behind the demands of users practicing these informal activities on Sidewalks?
- What are the motives behind their territorial behaviors on the Sidewalk premises (or beyond its premises)?
- What are the factors (social, spatial, economical,..etc) facilitating the existence of these practices?
- How can the study of these spatial practices be implanted in the urban planning system/procedure?
- How do pedestrians on the Sidewalks perceive these informal practices?
- How do the users of these practices perceive their territories on sidewalks?

## 1.5 Research Methodology

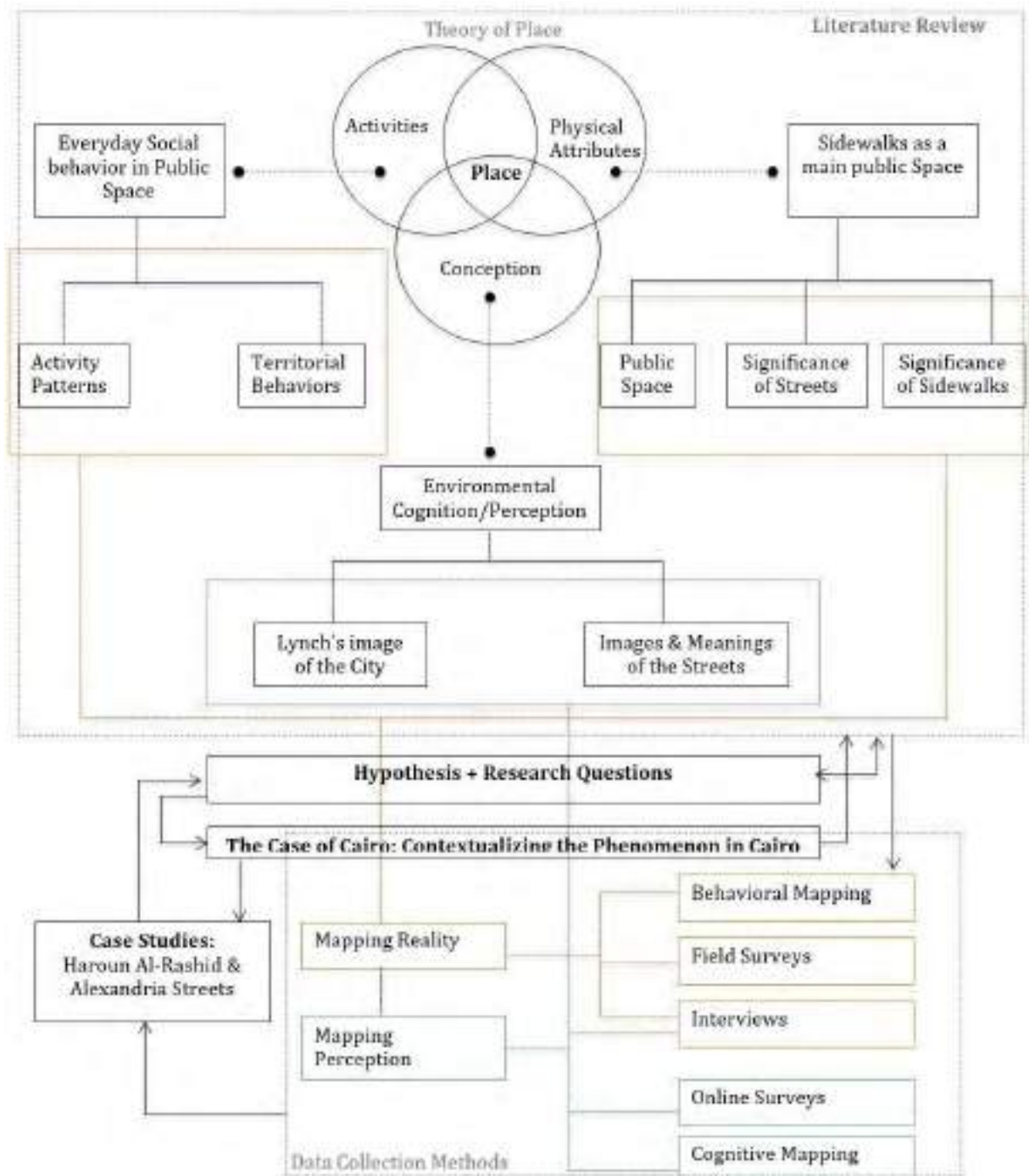
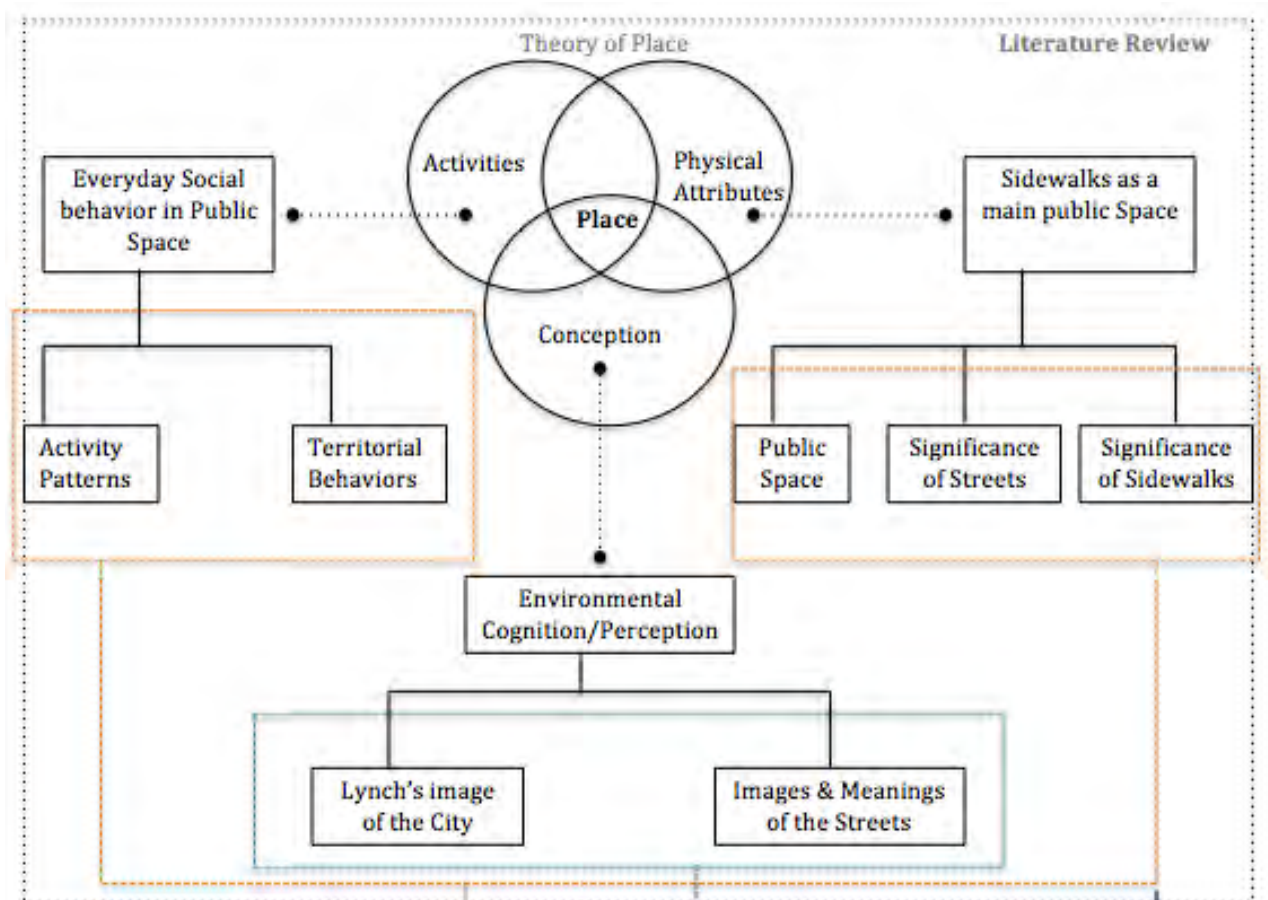


Figure 3 - Research Methodology. Source: Author

- 1.6 Research limitations

There is lack of comprehensive literature discussing, explaining, or investigating the phenomenon of daily informal practices on the sidewalks of Cairo. There are even few literatures discussing the importance of studying and investigating the sidewalk as a vital public space. Therefore, the researcher had to review several international literatures to contextualize the phenomenon to suit the context of Cairo. Also, since this phenomenon was never addressed in Cairo, the researcher depended on primary data for collecting the information needed regarding the historical development of the phenomenon on the sidewalks, alleys, and streets of Cairo. Not only that, but also the lack of studies and literature led to the fact that, in some parts of the analysis, there is full dependency on the data collected from in-depth and structured interviews, videos and photography, and online surveys and cognitive mapping. This might lead to the fact that some of the results might not be representative.





## Chapter 2

## 2 Literature Review

### 2.1 Introduction

In this chapter, literature discussing the importance of studying the sidewalk space, the understanding of the everyday social behavior in public spaces, and the significance of the images and meanings of the street were reviewed with the objective of contextualizing the phenomenon of informal practices on the sidewalk spaces of Cairo. First, it was important to highlight the importance of studying the sidewalk space as the context of the study, since few amount of literature addressed its importance. In this framework, it was important to first identify the definition of public space that suits the scope of the research and also the significance of streets. Secondly, since these informal practices are forms of territorial behaviors, the theory of place, the importance of activity patterns (according to the studies of Jan Gehl), and the understanding of territoriality/ territorial behavior in public space were identified and explained. Finally, since these practices on the sidewalk affect and is affected by the perception of the various actors involved, the last section briefly addressed the definition of environmental perception and highlighted the importance of **understanding Lynch's image of the City within this framework.**

### 2.2 Sidewalks as the main public Spaces of the City

In many cities, sidewalks are the most important and the most overlooked public space. However, in terms of square-meter area, **a city's sidewalk system usually exceeds the city's parks and large open spaces (Kim, 2015).** Sidewalks spread in between the building blocks to reach people in many parts of the city. Thus, it is important in this section to identify the significance of studying the sidewalk space by defining public space and highlighting the significance of streets in the city.

#### 2.2.1 Defining Public Space

It is essential in this framework that we define public space, as there are various definitions of public space distinguished by issues of ownership, control, access, and use. Public spaces are difficult to characterize because they vary significantly: access to a governance institution is different from access to

a sidewalk. Some authors define it precisely as the “space that is not controlled by private individuals or organizations, and hence is open to the general public” (Madanipour, 1996, 144). Others define public spaces as “publicly accessible places where people go for group or individual activities” (Carr et al., 1992, 50). However, it is important to define public space not only as a space accessible to the public, but also a space that would accommodate variable social behaviors. For example, Loukaitou-Sideris, A., & Ehrenfeucht, R. described it as “**a space** that is open to the public, which creates public use, active or passive social behaviors, and where people are subject to the general principles that manage **the use of the space**” (2009). In other words, it is referred to as a space accessible to a lot of different uses and practices, and therefore also, to different groups and persons.

The discussion and debate on public space is often the discussion about which activities and behaviors are deemed appropriate in space. In many ways, **we may think of public space as “flexible and ambiguous”** (Loukaitou-Sideris and Ehrenfeucht, 2009)—ever changing to accommodate the activities and behaviors of its users. Mitchell (2003) suggests that the appropriation and use of space by a group to fulfill its needs makes the space public. This way of conceptualizing public space is especially important because sometimes people also invent new activities in public space and often appropriate spaces to activities and behaviors that suit their needs. Therefore, it becomes a ground for shared interests and collective expressions, encouraging diversity, which is an important role of a public space (Mehta, 2013, p.155)

#### 2.2.2 Significance of Streets

*“Think of a city and what comes to mind? Its streets. If a city’s streets look interesting, the city looks interesting; if they look dull, the city looks dull.”*

—Jane Jacobs, 1961

Jane Jacob’s words quoted above reflect the importance of streets as a distinctive place in the domain of public open spaces. For much urbanity, the streets represent the outdoors (Jacobs, 1993). Throughout history, streets predominantly fulfilled the role of public space better than any other spatial classification; therefore, the discussion about the urban public space is often a

discussion of the street (Mehta, 2013, p.9). In this framework, it was useful to emphasize some of the diverse significant definitions of streets, which were stated by other researchers or urban scholars. One morphological definition of **street by Rapoport was “the more or less narrow, linear space lined by buildings found in settlements and used for circulation and, sometimes, other activities”** (1987, 81). In this definition, the emphasis is on circulation more than the activities that take place in the street as a physical entity.

However, although circulation is a primary purpose of the street, many urban scholars suggest referring to the street more as social space rather than a channel for movement (see, for example, Jacobs, 1961; Appleyard, 1981; Moudon, 1991; Gehl, 1987; Jacobs, 1993). Also, Gutman (1978) describes the **street as “ a social entity and its design reflects some social and cultural motives; it provides a link between people and facilitates communication and interaction” (Mehta, 2013, p.12)**. Lively streets can be identical with the qualities that Jacobs (1961) appreciated on Greenwich Village streets and sidewalks, and what Walzer (1986) has described as:

*Open-minded space, designed for a variety of uses, including unforeseen and unforeseeable uses, and used by citizens who do different things and are **prepared to tolerate, even take interest in, things they don’t do**. When we enter this sort of space, we are characteristically prepared to loiter (Walzer, 1986, pp. 470-471).*

Historically, streets in many cities were used as spaces, which serve basic survival, communication, and entertainment needs (Rudofsky, 1969; Lofland, 1973, 1998). In contemporary developed societies, many of these functions have moved to private or virtual realms or to different types of parochial and public spaces (Brill, 1989, 1990; Chidister, 1989; Rybczynski, 1993; Banerjee, 2001). However, especially in mixed-use neighborhoods, people still depend on streets for functional, social and leisure activities (Jacobs, 1961; Appleyard, 1981; Gehl, 1987; Vernez- Moudon, 1991; Carr et al. 1992; Jacobs, 1993; Southworth and Ben-Joseph, 1996; Lofland, 1998; Hass-Klau et al., 1999; Carmona et al., 2003).

### 2.2.3 Significance of Sidewalks

According to Kostof (1992), the first sidewalks were built around 2000



BC in central Anatolia (in modern Turkey); also many Greek and Roman cities had sidewalks facilitating movement along the edges of the buildings. **“Wheeled traffic was not allowed during the daytimes in the streets of Rome.”** (Carcopino, 1941) Most cities were primarily pedestrian-oriented. However, with the increase in traffic, the need for pedestrian only spaces started to appear. The first modern sidewalks appeared in London around the seventeenth century followed by other major cities in Europe (Mehta, 2013, p.35). Mehta also mentioned that Jane Jacobs argued for sustaining the urban life of the city through the **“messy vitality” of the streets and sidewalks at a time when the old city centers with vibrant streets were bulldozed and replaced with modern towers resonant with Le Corbusier’s cities** (2013, p.50).

*“Streets and their sidewalks, the main public places of a city, are its most vital organs.”*  
—Jane Jacobs, 1961

Jane Jacobs also emphasized that **“streets in cities serve many purposes besides carrying vehicles, and city sidewalks - the pedestrian parts of the streets - serve many purposes besides carrying pedestrians.”** (1961, p.107) For Jacobs, sidewalks are active places of socialization and pleasure, which is a characteristic that kept communities secure and controlled. However, a general definition of sidewalk in the dictionary is **“a path with a hard surface on one or both sides of a road, that people walk on.”** (Cambridge dictionary) This definition of sidewalk shows how the role of sidewalks is relatively undermined, and limited only to its physical feature as part of the street. The relative lack of scholarly work on sidewalks by themselves might be clarified by being defined as an indistinguishable part of the street, however, sidewalks differ from the roadbed, and have been accommodating distinct uses since they were first constructed (Loukaitou-Sideris, A., & Ehrenfeucht, R., 2009). Loukaitou-Sideris and Ehrenfeucht (2009) argue that sidewalks are undervalued elements of the urban form, that are mostly taken for granted, although most of the people in the city use sidewalks at least once everyday. Sidewalks also differ from one another based on their location inside the city, their surrounding demographics, and the particular uses and buildings accompanying them. Consequently, the ways in which they are used and perceived by different users directly affect the residents of the adjacent buildings (Loukaitou-Sideris, A., &

Ehrenfeucht, R., 2009). Therefore, sidewalks are distinct small public spaces of everyday life, and a unique space of the urban environment.

Michel de Certeau (1993) has described the city as a story that progresses continuously as people move through space on different traces. Sidewalks can **be defined as such spaces of movement, as “the breathing space of city life, offering opportunities for exploration, and discovery, for the unexpected, the unregulated, the spontaneous, and the risky.” (Franck and Stevens, 2007, p.3)** In other words, visitors and residents on sidewalks interact with each other in numerous formal and informal ways, which allows for the liveliness and openness of the space. The interaction between the different users of the sidewalks can be clear in different ways, supporting the high sociability level of the neighborhood. Studying three primary retail streets in different neighborhoods; Massachusetts Avenue, Harvard Street, and Elm Street, Mehta found out that many had furnished the adjacent space on the sidewalks to create an atmosphere for gathering and interaction (see fig. 3), also people gathering for long durations on benches located on well shaded sidewalks without purchasing from any businesses (see fig.4) (2013, p.112). Another important observation from the study of these three streets was related to the width of the sidewalks. Interviewees recommended wider sidewalks in order to accommodate some stationary activities (street furniture and other objects) adjacent to the walking space (Mehta, 2013, p.133).

**“Design scholars have often imagined open, green spaces when discussing public space’s function in providing leisure as a release valve to the stresses of urban life and reconnecting people to nature and each other.”** (Kim, 2015) However, despite its importance, until recently, few scholars of public space have focused on the sidewalk. Recently, Annette Kim, an associate professor of public policy and the founding director of SLAB, the Spatial Analysis Lab, at the University of Southern California, provided the first multidisciplinary case study of sidewalks in a unique geographical area in her book *Sidewalk City* in 2015. In this book, she focuses on Ho Chi Minh City, Vietnam, which she described as a rapidly growing and evolving city, where its multicultural residents have built up through history alternative legitimacies and norms about the use of the sidewalks (Kim, 2015). The distinctive methodological approach used helped in understanding and highlighting of the

significance of sidewalks uses and the conflicts over its ownership in the city. Based on her fieldwork over 15 years, she developed methods of spatial ethnography and critical cartography to overcome usual seeing, and recorded the spatial and social patterns of how the city's vibrant sidewalk life is practiced.



**Figure 4 - At certain points, businesses furnished the street to create an inviting gathering space (Mehta, 2013, p. 112)**



**Figure 5 - At several locations wide tree-covered sidewalks with benches enable people to gather (Mehta, 2013, p. 112)**

## 2.3 Everyday Social Behavior in Public Spaces

### 2.3.1 Theory of Place

Theorists within urban design such as Relph (1976), Canter (1977), Punter (1991) and Montgomery (1998), thought about the place components and the relationships between them. For Relph (1976), each place has a **“unique address”**; he argues that **“physical setting”, “activities” and “meanings”** constitute the three basic elements of place. Canter (1977), then he began his theory by addressing these two questions (Canter, 1977: 158): What are the main components that integrate to create places? And what procedures are available for identifying places and their attributes? Answering these questions was possible with reference to the conceptual diagram of the components of place. **Therefore, drawing on Relph’s work**, Canter (1977) introduced places as **a function of “activities”, “physical attributes” and “conceptions”** (See figure 01). This model indicates that the potential relations between actions, conceptions and physical attributes will lead to creating a place. Therefore, it is important to find out what activity is related to, or is expected to take place within a given place; what the physical features are; and what conceptions people hold of that activity within the physical setting.

One way to identify a place is direct observation based on information concerning what Activity happens where (Canter, 1977: 31-44 and 160-161). Thus, Canter (1977) emphasize that to study places there are three methods that can lead to characterizing places: sketching, to reflect the physical qualities; description such as conceptions; and activity mapping, to represent activities and reveal who does what where (Canter, 1977: 160-161).

Building on Relph **and Canter’s theories**, **Punter’s (1991) work provides more** detail on components of a place and linked these components with urban design principles (fig 6). Soon after, Montgomery (1998) derived a model including all the components of place; physical setting, activity and image (See fig. 7). This model is considered the most recent reinterpretation of the components of place and specifies the relationships between them (Montgomery, 1998, 96).

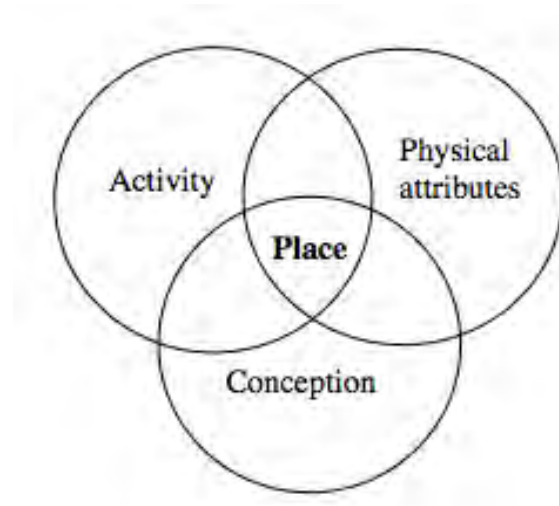


Figure 6 - A conceptual diagram for the components of place (Canter, 1977)

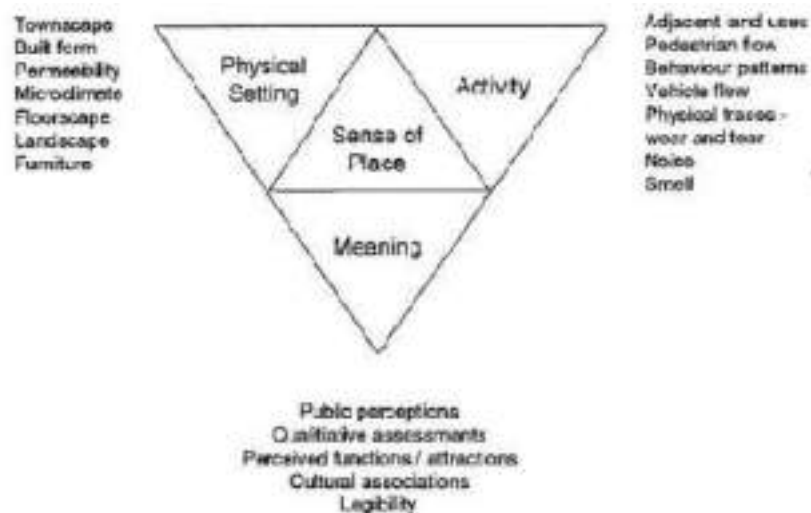


Figure 7 - Components of Sense of Place (Punter, 1991)

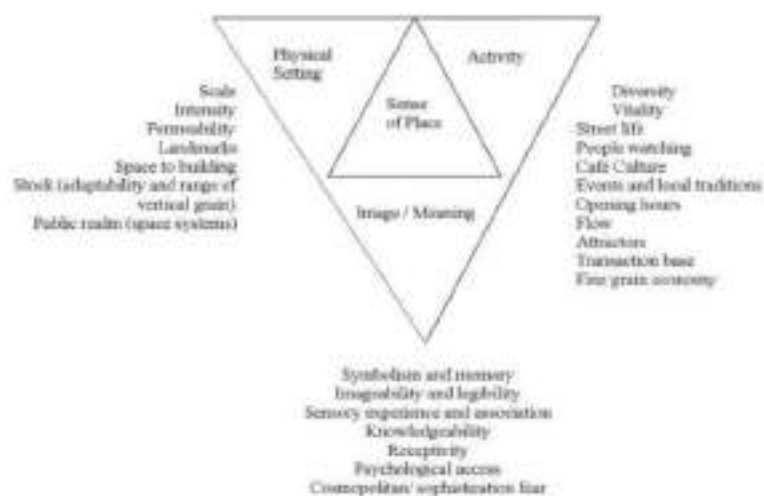


Figure 8 - Components of Sense of place (Montgomery, 1998)

### 2.3.2 Activity Patterns

Many places have clearly defined activity patterns associated with them. Some activities are appropriate to certain places, and some places may be characterized with particular activities (Canter, 1977: 116). According to Canter (1977), the issue is that some places have very specific functions and appropriate categories of activities, while for others it is more difficult to identify particular activities. The character of places thus is derived from the range of activities they accommodate. Therefore, most places are somewhere between these two extremes and understanding place differentiation relates to the pattern of activities taking place within them (Canter, 1977: 117).

According to Jan Gehl (1987), one of the most important attributes of public spaces is people activity. His principle attitude in public space design is that people attract each other: **“If given the choice between walking on a deserted or a lively street, most people in most situations will choose the lively street. If the choice is between sitting in a private backyard or in a semiprivate front yard with a view of the street, people will often choose the front of the house where there is more to see.”** (Gehl, 1987) In terms of activities typology, he distinguishes three main types; necessary/functional activities, optional/recreational activities and social activities that take place based on public space characteristics. His final argument derived from his researches result and **activity typologies is that “it is possible to influence some aspects of activities, such as how long the individual activities last, which activity types can develop and, how many people use public spaces, through the design and physical settings”**. Most importantly, Gehl (1987) believes that spaces become meaningful and attractive when all activities of all types occur simultaneously.

### 2.3.3 Territorial behavior in Public Space

Some types of activity patterns take place in the form of territories in public space. Territoriality, in this framework, is discussed in the context of the built environment as a way of dealing with the subjects of accessibility and the public environment of urban spaces. **“First recorded in animals, territoriality or territorial behavior in humans is a kind of spatial behavior that involves permanently or temporarily laying claim to ownership of an area by personalizing it with the use of physical and/or symbolic barriers, markers and**

artifacts” (Hall, 1966; Altman, 1975; Brower, 1980; Lang, 1987).

Therefore, territorial production in urban spaces always leads to the question of public vs. private. Thus, it is crucial to understand and define the term territoriality within this framework. Schefflen (1976) has defined territory as **“a unit of space defined for a time by some kind of human behavior.”** Here, the factor of time plays an important role in defining the territorial production, **referring more to temporary territories. Adding to this definition, it is also “a space owned or occupied by a person or group, where the occupant(s) perceive that they control access to the space and activities in the space.”** (Edney, 1976a, 1976b) Therefore, in the scope of urban public spaces, territoriality is understood in its spatial form of controlling and influencing resources and people by appropriating the area around them. When personalizing a space, people adjust the surrounding environment to meet their personal needs and specific activity patterns (Mehta, 2013). This provides psychological security, a symbolic aesthetic, and the marking of territory (Lang, 1987, p. 148).

*“Signs associated with occupancy can do more than announce the existence of territorial claims; they can also be seen as visible evidence of caring. They can represent a feeling of attachment between the occupant and the physical setting, and as such they will be felt to add “warmth” or “intimacy” to a setting, which, in the absence of such signs, would be too “monumental” or “sterile” or “inhuman””*(Brower, 1980, p. 189).

Therefore, the signs and objects used for manifesting a sense of personalization suggest the existence of people and activity, and therefore of life, adding a livability to the environment. **“The concept of territoriality deals, then, with behavior that directly affects the security and maintenance of the physical environment. Because of this, it has much to offer to the city planners and urban designers”** (Brower, 1980, p. 183). When the level of personalization increases, they add those elements in the environment that are of primary interest to people (Gehl, 1987).

Based on the previous definitions of territoriality in the framework of urban public spaces, there can be different forms of territorial productions in public spaces. Karrholm, in his article **“Territorial Complexity in Public Places”**, classified territorial productions into four forms: Territorial Strategies, Territorial Tactics, Territorial Association, and Territorial Appropriation (2005, p.100). Karrholm defines territorial appropriation as **“producing territories through repetitive and consistent use of an area by a certain person or group who to some extent perceive this area as their own.”** (2005, p.100)

When people tend to appropriate territories in public spaces, the movable furniture plays an important role in facilitating the process, where they are organized and controlled by users to converse different meanings (Karrholm, 2005, p.106). Building on this phenomenon, William Whyte (1980) observed that people often tend to move a chair before they sit down, which although is a small move, but yet have a lot to do with appropriation. However, the overlap of several layers of territorial productions in a public space can lead **to territorial complexity. “Things add up and they don’t. They flow in linear time and they don’t. And they exist within a single spaces and escape from it.”**(Mol & Law, 2002) This quote refers to the description of territorial complexity, which is described by the large number of territorial orders, the multi-layered territorial production, and the dynamic interrelation between different territorial productions (Karrholm, 2005, p.111). Karrholm concluded that **territorial complexity shouldn’t be observed as difficult to comprehend**, however, they should be observed as simple and logical part of everyday life (2005, p.111). In this context, public space can be described as the product of several territorial layers.

## 2.4 Images and Meanings of the Street

*“The street is the most heterogeneous of all space types in the city. There are multiple images and meanings of the street—as many as there are functions and uses. For some urban critics the street is a place of community life, for others it is a place of decadence- of consumption and consumerism, for yet others it is a battleground- a dangerous and mean place for the*



*underprivileged and the other.”* (Mehta, 2003, p.13)

It was clear from the discussion above that people and the activities that they perform are as significant as the static physical features of the city. One important physical feature of a city is its streets, which hosts many activities and uses. Lynch has identified the paths (and its uses) as one of the important physical elements that contribute to construct the image of the city. Therefore, our focus here is on the image and meaning of the street. Throughout history, streets predominantly fulfilled the role of public space better than any other spatial classification; therefore, the discussion about the urban public space is often a discussion of the street (Mehta, 2013, p.9). Therefore, when people are asked what comes to their mind when they think of the street, there is a wide **range of responses. Mehta (2013) states, “some are descriptions of existing everyday conditions—some subtle and some glaringly obvious—made visible to us by urban observers. Others are sketches of idealized utopian conditions dreamed up or drawn out with great vision and foresight to transform the landscape of the city.”** Therefore, these images may not fall into categories, where there are a large number of overlaps. They are shaped through the use and appropriation of the street. When new activities are introduced and new boundaries are set during the use of the street, the meanings and images consequently change (Mehta, 2013, p.13).

#### 2.4.1 Definition of Environmental perception

**“A city is the characteristic physical and social unit of civilization. It possesses size, density, grain, outline and pattern as the basic aspects of the city’s physical form. The people who live in it shape these properties and are shaped by them.”** (Lynch, 1960)

This quote highlight that the value of perceptual dimension of urban design is the emphasis placed on people and how they perceive, value and determine particular meaning for the urban spaces. **Perception “involves the gathering, organizing and making sense of information about the environment.”**(Carmona, 2003, p. 87) Therefore, perception (sometimes referred to as ‘cognition’) is concerned with more than just seeing or sensing the urban environment.

According to Downs and Stea, “to many geographers, perception is an all-encompassing term for the sum total of perceptions, memories, attitudes, preferences, and other psychological factors, which contribute to the formation of what, might better be **called environmental cognition.**” (1973, p.13) They argue that the difference between perception and cognition is one of degree and **focus, where cognition is the more general term that involves “perception as well as thinking, problem solving, and the organization of information and ideas.”** (1973, p.14) They also suggest that the overall mental image (cognitive map) of the urban environment will be: partial; not covering the whole city, simplified; excluding a great amount of information, idiosyncratic; every **individual’s urban image is unique, and distorted; based on subjective, rather than real, distance and direction** (1973). Therefore, people behave in the world “**as they see it**”- whatever the flows of cognitive maps, they are the basis for spatial behavior. (Downs & Stea, 1973, p.22)

#### 2.4.2 **Lynch’s** *Image of the City*

Since the early 1960s, an integrative field of environmental perception **was developed, and there now exists a suggestive body of research on people’s** perception of their urban environment. In his research, Lynch (1960) added that nothing in the environment is experienced by itself, but it is always experienced in relation to its surroundings, the sequences of events that lead to **its existences, and the user’s memory of past experiences.** This means that every **citizen’s image is based on memories and meanings associated with certain parts of the city.** The discussion here is based on a phenomenon that “is so much part of our everyday lives and normal behavior that we naturally overlook them and **take them for granted.**” (Down & Stea, 1973) **People behave in the city as** they see it and experience it. Therefore, people and the activities that they perform are as significant as the static physical features of the city (Lynch, 1960, p.2). Hereby, it is important to understand the city as being perceived by its users and not just the city as a thing on its own. Lynch (1960) also adds that the repeated experience of the users or observers in the city changes the whole perception, where they need no longer to add new data to an old framework.

Lynch (1960) suggested analyzing the environmental image into three components: *identity, structure, and meaning* (p.8). By this, it means that for

the image to be constructed, first, the user identifies a certain object from others. Then, this image must include spatial relation of this object to the observer and to the other objects as well. Finally, this object must create some meaning to the observer or user of the city. Based on this framework, Lynch (1960) identified five key physical elements: *paths, edges, districts, nodes* and *landmarks*, which contribute to construct the image of a city.

***“Districts are structured with nodes, defined by edges, penetrated by paths, and sprinkled with landmarks...elements regularly overlap and pierce one another.”*** (Lynch, 1960)

## 2.5 Conclusion

This chapter reviewed literature regarding the importance of investigating sidewalks and streets as vital public spaces in the city, the relevant theories regarding the everyday social behavior in public space, and the significance of understanding the images and meanings of the streets in terms of relevant theories: ***Lynch’s Image of the City***. As mentioned earlier, this review was conducted based on the fact that there was no sufficient amount of literature available specifically on the phenomenon of informal practices as territorial behaviors on the sidewalks, locally and internationally. Also, it was clear in this chapter that the investigation of sidewalks has been tackled by few urban scholars and researchers internationally. Therefore, the information presented in this chapter worked as a base for building the knowledge needed for understanding the phenomenon in **Cairo’s context, identifying the suitable** research methods, analyzing the findings, and proposing recommendations.





## Chapter 3

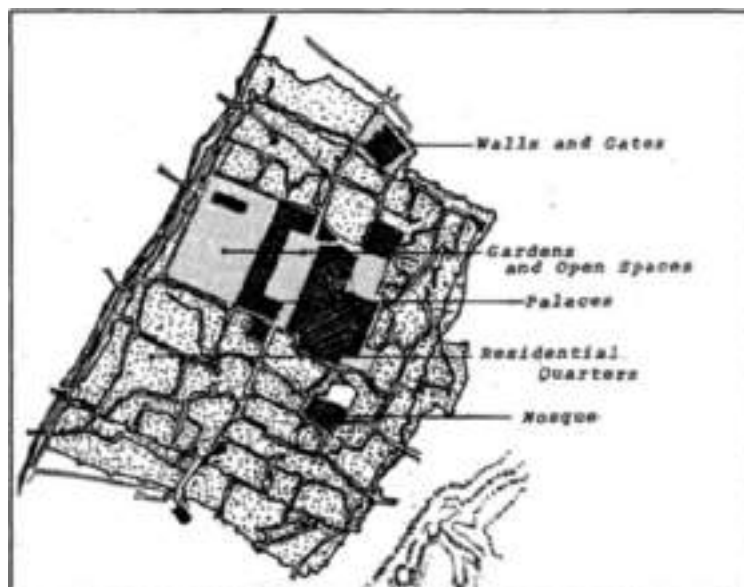
# 3 The Case of Cairo

The information included in this chapter reflects an attempt to track the **historical development of the phenomenon of informal practices on Cairo's** sidewalks, since there is a great lack of literature addressing this phenomenon in Cairo. Based on that, it highlights the value of the streets and its uses in Islamic Cairo and the value and uses of the alleys as important public spaces in historic Cairo. This was done in order to be able to reflect on the complex current uses of the sidewalks, and define the informal practices on the sidewalks of Cairo today.

## 3.1 Brief Historical background on Islamic Streets

The first streets appeared in Al-Qahira Al-Fatimiya, and the only public elements back then were the mosques and some other administrative facilities (Al-Sayyad, 1981). According to Al-Sayyad, the only public spaces were the major roads (where some commercial activity developed), streets were considered as private properties since they encompassed the internal circulation network inside the neighborhoods (Fig. 09)

It is suggested that the pattern of narrow streets evolved during the Ayyubid rule of Egypt. Abdel Lattif al-Baghdadi, an Iraqi traveller and scientist, visited Cairo in 1193 during the reign of Salah al-Din, where he provided a description of Cairo (Al-Qahira)



**Figure 9 The internal structure of Fatimid Al-Qahira. (Alsayyad,1981)** and its streets, and he remarked that the city was composed of tall buildings and wide streets (Al-Baghdadi, p.40). On the contrary, 50 years later, a Moroccan traveller, Ibn Said, visited Cairo in 1243, at the time when the

Ayyubid dynasty had started its decline, where he remarked that the streets of Al-Qahira were very narrow and accommodated mixed functions (Al-Sayyad, 1981). According to Al-Sayyad, it is possible to conclude that the narrow streets of *Al-Qahira* could be attributed to the spontaneous development that took place in the time of the Ayyubids (p.25).

*“The pattern of narrow labyrinthine street arrangements might be considered cumbersome and confusing to the modern mind seeking to move objects readily through all parts of the city, because the streets of Islamic Cairo were not designed to ease mobility and exchange, but rather to control and compartmentalize it. The narrow street was accordingly a sort of built-in system of traffic control, which consequently created an effective zoning plan. This pattern arrangement dictated the creation of a street where the intensity of interaction was maximized; a street within which the individual would be moved along by the overwhelming feeling of belonging to the whole; a street within which the individual was the focal point and not an incidental, casual participant.” (Al-Sayyad, 1981)*

### 3.2 Valuable public space in historic Cairo: The Alley

In this framework, it is important to highlight more on the value and socio-spatial characteristics of streets in historic Cairo. In historical times, as visualized in the old Egyptian movies, the alley represented a strong urban element in Old Cairo. The medieval core of the city dating to 696 AD, included a group of *Hawari* (**sing.Harah**) (see fig. 10), which are mostly “residential communities formed around narrow, non-straight alleyways and incorporating a limited amount of commercial activity. Each harah is characterized by the spatial order of its shared public space- the alleyway- as bounded by its entrances/ gates and lined by attached low-rise houses. But it is also defined by a distinct social structure, cultural identity, and shared responsibility for local security.” (Abdelmonem, 2012, p.36)

Therefore, the role of the alley, as the main space of activity and social life, was much more valued than the individual buildings enclosing its boundaries. It was also described by Mohamed Abdelmonem that the extension of some homes in Old Cairo to the alleys and the way street furniture were

synchronized revealed the desire of the residents to maintain the sense of home to the outdoor space (see figure 12)(2012, p.42). Alleys were valued public spaces, where residents referred to them as their homes. Moreover, he observed the multi-functional use of alleys throughout the different times of the day, where it was used for trading and industrial purposes in the morning (see fig.11) and a place for social interaction and communication in the evening (AbdelMonem, 2012, p.43). This flexibility of use was also clear in the way residents quickly transformed spaces in the alley to suit different purposes- **“part-time spaces”**(AbdelMonem, 2012, p.40). **Mohamed Abdelmonem described “part-time spaces” as spaces with elements that are mobile and easily changeable**, for example, mobile furniture that can be easily reorganized according to the different purposes (2012, p.40). This phenomenon reflects the sustainability of way of living, where the community manages its resources and its spatial settings in an organized way that responds to their different needs.



**Figure 10 Haret al-Darbal- Asfar, a typical Cairene harah defined by the surrounding continuity of houses: “A path closed by masonry.” (AbdelMonem, 2012, p.40)**





Figure 11 - Human-product conflict in the alleys. The flow of products through the alleys during the day sometimes interrupts human traffic. (AbdelMonem, 2012, p.43)

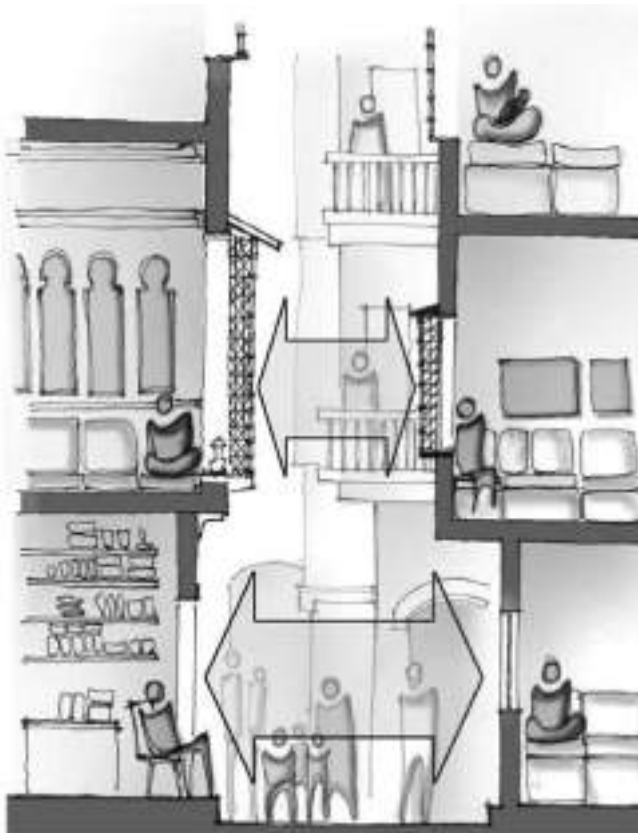


Figure 12 - Typical section of a Cairene Alley, showing a multi-layered arrangement of social interaction at higher levels, while public traffic dominates at the ground level. (AbdelMonem, 2012, p.43)



Therefore, the street life in Cairo, as a socio-cultural setting, can be identified as one of the substantial features of the Cairene identity, where the outdoor spaces of street cafes, markets, or residential/commercial outdoor extensions are a display of several activities for the residents (Abdel-Hadi et al., 2009, p.1). The discussion on the streets in Islamic Cairo shows the streets were used mainly for pedestrians and for commercial activities. However, **since there isn't** a clear evidence for the first appearance of the sidewalks in Cairo, therefore, the researcher attempted to frame its historical development in a way that reflect her own interpretation. A simple definition of sidewalk is that it is an item of the urban envelope that was introduced due to the need of separating the pedestrian movement from the vehicular movement. Therefore, it can be **interpreted that it wasn't** introduced in Egypt earlier than the introduction of vehicles in Egypt. It was mentioned that one of the first cars brought into Egypt **was a one that belonged to khedive Ismail's grandson, prince Aziz Hassan in** around 1904-1905 (Raafat, 1997). **However, the city planning at that time didn't** yet still accommodate the movement of vehicles, until Baron Empain came to Egypt at that time and planned Heliopolis with the urban planning standards of the west, where he introduced the typical modern setting of the sidewalk space that we know of today.

### 3.3 How can we define informal practices **on Cairo's**

#### Sidewalks today?

Building on the discussion around the value of the Alley in historic Cairo, the phenomenon of spatial complexity in the use of public spaces became even more dominant on a broader scale in Cairo today. After the January 2011 revolution, the urban order of the city was transformed, in relevance to the political, economical, and social shift in the structure of the city (Nagati & Stryker, 2013, p.4). Although informal practices have existed in **Egypt's** public spaces for decades (See fig,13,14,15,16,17), new forms of informality have taken place after the revolution, when the state became vulnerable and the citizens became empowered to re-shape the urban landscape of the city (Nagati & Stryker, 2013, p.13). In other words, people are not basically using their streets in a very different way, but they are even reinventing spaces based on their daily needs. **However, as mentioned in the paper "Spatial relations of Informal**

Practices in Cairo Streetscape”, daily informal practices; in their economic, social, and spatial relations within streetscapes, are important aspects of Cairo’s metabolism (Ravazzoli & Toso 2013, p.7). They have a great impact on the citizen’s quality of life, create distinct transformations in open spaces and ground floor’s landscape, and produce spaces of negotiations and contestation. According to Jan Gehl, activities in public spaces can be divided into three categories, each affecting the physical environment differently: necessary activities, optional activities, and social activities (1987, p.11). If we were to reflect on the daily informal practices in Cairo streetscape, it would be difficult to allocate them under one specific category. **“Something happens because something happens because something happens”** is a quote he used to describe life between buildings as a self-reinforcing process (Gehl, 1987, p.75). Where individuals and events encourage one another to exist in public space, producing a more complex pattern of activities. This phenomenon can help to explain the complex agglomeration of informal activities in some places than others.

*“The sidewalks of the Egyptian Streets are ruled by the people. It has its unique character that distinguishes it from other sidewalks around the world. It can be captured as a great portrait, full of faces, colors, and unique details. It is difficult to fully understand, and therefore you take it as it is. They say that life on the sidewalk is a mirror of its society; where it highlights their social, economic, and cultural characteristics. The sidewalk in the village differs than the sidewalk in the elite neighborhoods, which also differs from the sidewalks of downtown, or the sidewalk of informal settlements. Each portrays the unique characteristics of its community.”*

(ELgamal, S. 2009)



Figure 13 - Photo of Sidewalk café in the Place De L'Opera in Cairo, 1910. (Epstein, 2013)



Figure 14 - Figure 14 Selling Soft Drinks, 1910 (Epstein, 2013)





Figure 15 - Hanging Laundry in Cairo streets (Epstein,2013)



Figure 16 - Men Walking down a street in Cairo, 1910 (Epstein,2013)



Figure 17 - bustling street in Old Cairo, 1934 (Qin, Zin, 2016)



Figure 18 - Cairo Street Scene, 1942(Usbpanasonic, 2013)





# Chapter 4

## 4 The Fieldwork

In this chapter, the researcher aims at identifying the justification for selecting the two case studies: Haroun Al-Rashid and Alexandria Streets in Heliopolis as well as explaining the data collection methods that were undertaken. This chapter provides an in-depth explanation of the data collection methods to reflect on the importance of using comprehensive investigation tools, collectively used for developing a better understanding of the spatial manifestation of the phenomenon and representing the needs of the community involved.

### 4.1 Site Selection

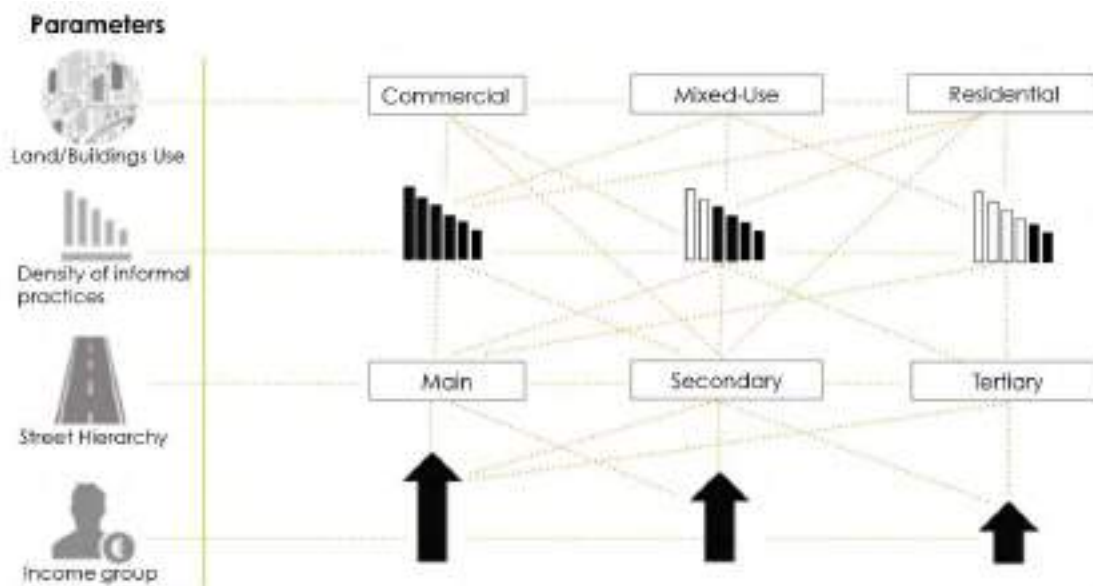
#### Why Heliopolis?

As mentioned before, informal practices on Cairo sidewalks take place not only in *informal neighborhoods* but also in many of Cairo's *formal* neighborhoods. The choice of middle-class neighborhood is based on having a strong juxtaposition between *formal* and *informal* to develop a better understanding of the phenomenon. The initial purpose was to choose two or three streets in a middle class district/neighborhood as a setting for the study.

Based on the reviewed literature regarding the importance of studying the sidewalk space and the interpretation regarding the first appearance of modern sidewalks in 1905, with the planning of Heliopolis, the two case studies were chosen in Heliopolis district. Modern **urban planning started to appear in Egypt in the planning of Downtown Cairo. However, Downtown Cairo is too complicated and overloaded with other factors not related to the studied phenomenon. However, Heliopolis was the second city planned, and as mentioned, the first appearance of modern sidewalks was interpreted to be during this period of time.** Therefore, it was selected for investigation. The choice of case studies was initially based on having easy access to the required data, the existence of informal practices, the existence of a distinctive urban fabric, and a strong juxtaposition between *formal* and *informal*. Based on that, Heliopolis was chosen as a middle-class district, which has a strong historical value, unique urban fabric, and there is a sufficient amount of historical data available.

The choice of case studies (streets) was based on these parameters: land use

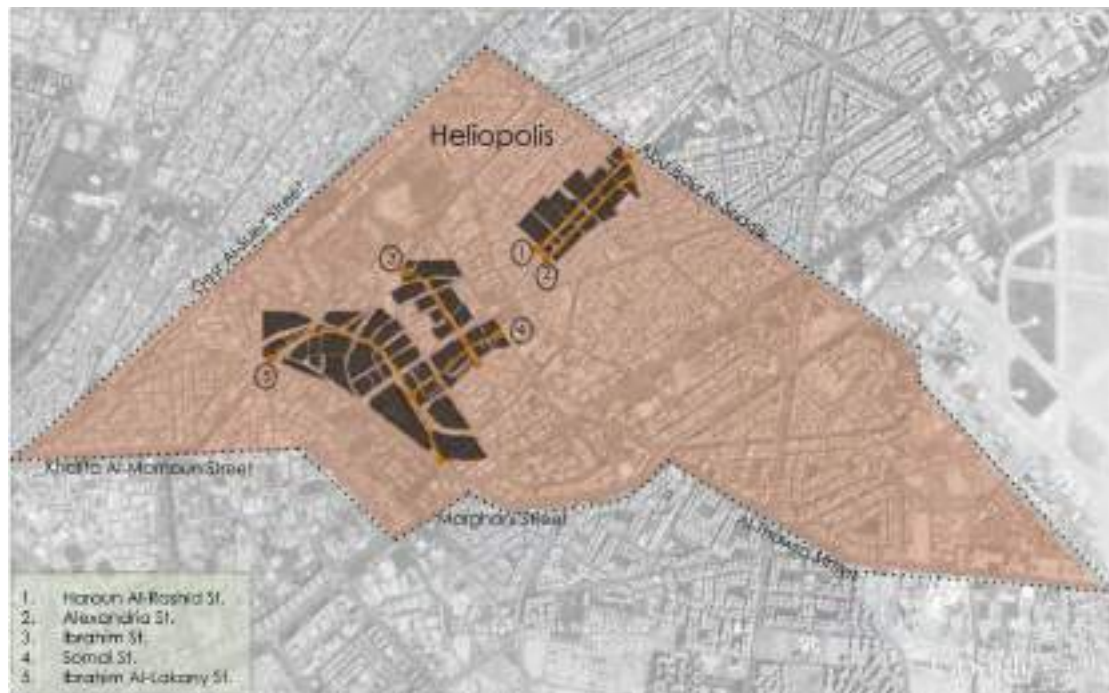
type, density of informal practices, street hierarchy, and income group (See fig.19)



**Figure 19 - Matrix identifying the Criteria for the selection of Case Studies. Source: author**

Therefore, five streets in Heliopolis were suggested for the study (See fig. 20):

- 1) Haroun Al-Rashid Street: *Main Mixed-used Street, mostly commercial, with high density of informal practices on its sidewalks. It is considered as a low-class income street.*
- 2) Alexandria Street: *Secondary Mixed-used street, mostly residential, with lower density of informal practices on its sidewalks. It is considered as a lower-middle-class income street.*
- 3) Ibrahim Street: *Secondary Mixed-used street, mostly commercial, with moderate density of informal practices on its sidewalks (mostly at night). It is considered as an upper-middle class income street.*
- 4) Somal Street: *Tertiary mixed-used Street, mainly residential, with moderate intensity of informal practices on its sidewalks. It is considered as a middle-class income street.*
- 5) Ibrahim Al-Lakkany Street: *Main Mixed-used Street. Mostly commercial, with lower density of informal practices on its sidewalks (only in the intersection with secondary streets). It is considered as an upper-middle-class income street.*



**Figure 20 - Map of Heliopolis showing the streets proposed for the selection Source: Author**

### Why Haroun Al-Rashid and Alexandria Streets?

Haroun al Rashid and Alexandria streets are only 50 meters apart. This area, as will be further described in details in the following chapter, have a distinct urban morphology and architectural history. Despite the close proximity of the two mixed-use streets, Haroun Al Rashid st., which is a famous commercial street, is more accumulated with various informal practices on its sidewalks than in Alexandria Street, which is mostly a residential street with few commercial activities. The physical characteristics of the streets and sidewalks differ based on the hierarchy of the street and the land use type. Therefore, the two streets were chosen, for the geographical proximity and the difference in the intensity of informal practices, while eliminating the socio-cultural difference. This would give a better space to investigate how historically that developed because Alexandria Street has never been a mixed use street until *Midan Al-Gamea* (including Haroun Al-Rashid Street) became a vibrant commercial street, so that brought in a different routine of using the area and developed new movement patterns and new functions all together.

## 4.2 Data Collection Tools

The reason for choosing to study only two streets was to be able to investigate the phenomenon in depth, using various investigation tools collectively to establish a comprehensive understanding of:

- The principles behind the demands of users practicing these activities,
- The motives behind their territorial behavior on the sidewalk,
- The factors triggering their existence and affecting their spatial patterns
- The perceptions of the different actors involved towards this phenomenon.

Based on that, the data collection methods were divided into two parts ( see fig 21). The first part is *Mapping Reality*, and the second is *Mapping Perceptions*. *Mapping Reality* included the behavioral Mapping (Video recordings, geo-tagged photography, sketches, coding & counting) and interviews (In-depth and structured open-ended interviews). *Mapping perception* included online surveys and cognitive mapping.

The study was conducted on summer days with optimal weather for outdoor stays, that is, not too hot: days with adequate weather for the time of year (26-30 degree Celsius). The fieldwork was undertaken in the period from Mid-August to end of September 2017. Mapping Reality took almost one month of fieldwork, while mapping perceptions took place afterwards, which was conducted in around two weeks. The behavioral mapping and the interviews were conducted at three different times of the day in both streets ( see fig 21):

- In the morning: Time range from 8 am to 11 am
- In the afternoon: Time range from 2 pm to 4 pm
- In the evening: Time range from 9 pm to 12 pm

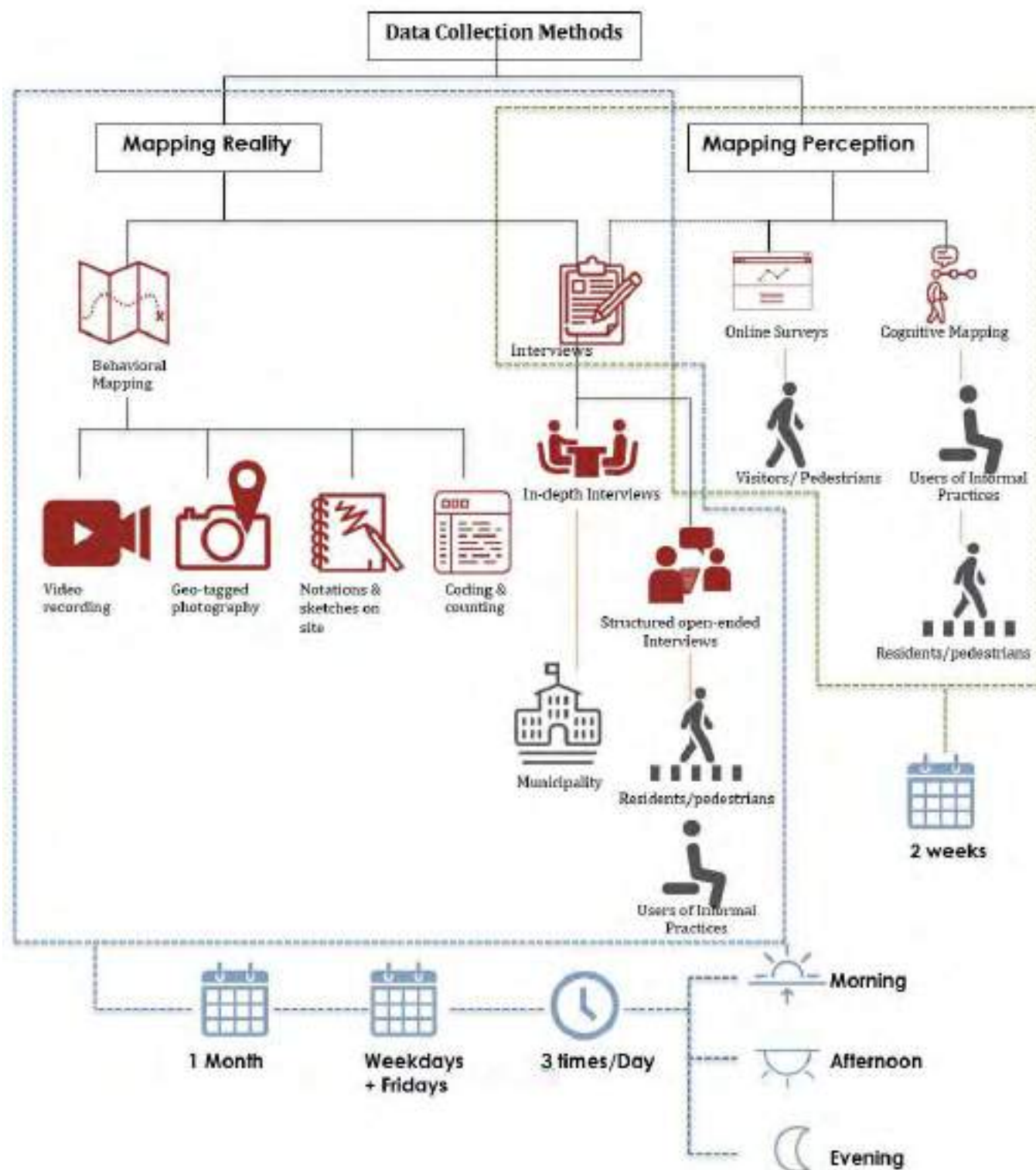


Figure 21- describing the data collection methods Source: Author

#### 4.2.1 Mapping Reality

As mentioned in the diagram (see fig. 21), *Mapping reality* included video recording of the walks, geo-tagged photography, initial notations and sketches, coding and counting of the different typologies, and structured open-ended and in-depth interviews.

*Mapping Reality* in this case is defining the phenomenon, because at this moment, this phenomenon is relatively unexplored, and only experienced as a norm. It links the design features of the setting or location with behavior in both time and space. This included participant and non-participant observations.

Behavioral mapping was conducted in accordance with five elements suggested by Ittelson (1970):

- (1) A graphic rendering of the area(s) observed.
- (2) A clear definition of the human behaviors observed, counted, described, and diagrammed.
- (3) A schedule of repeated times during which the observation and recording takes place.
- (4) A systematic procedure followed in observing
- (5) A coding and counting system, which minimizes the effort required in **recording observations**"

##### 4.2.1.1 The Invisible Observer: Video Recording

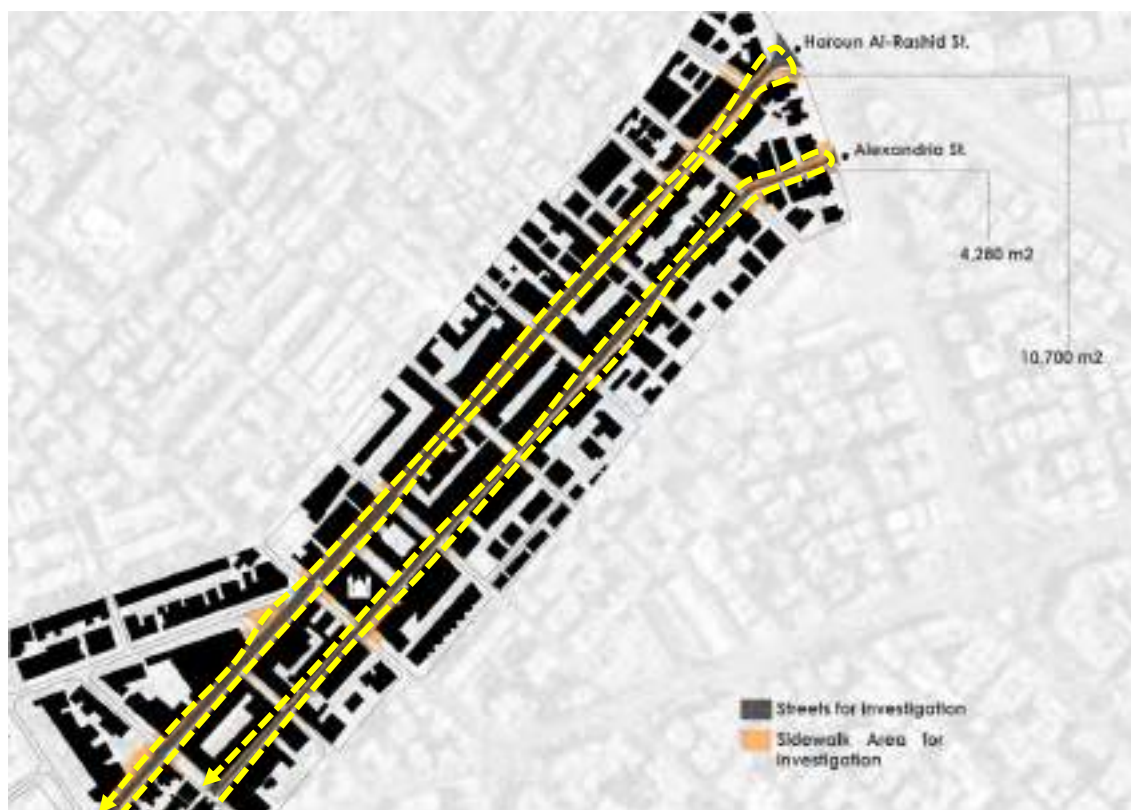
As a pilot study, this tool was initially undertaken on the sidewalks of the four suggested streets in Heliopolis: Ibrahim St., Somal St., Haroun Al-Rashid St., and Alexandria Street. Initially, the researcher chose to video-record the walk on the four streets to have a comprehensive understanding of the phenomenon of informal practices on the sidewalks in Heliopolis, in order to decide upon the case studies that will be chosen. This initial step was necessary to have a more accurate and easy recording when walking down the sidewalks in second time.

Then, the first step of the actual field survey process for the selected streets involved slowly video-recording while walking down their sidewalks to get familiar with the place and experience. The researcher slowly walked along the



complete length of both sides of the sidewalks and recorded a video of the whole walking duration without getting involved in any conversations with the sidewalk users (See fig 22). Video recordings worked as a very efficient tool for the researcher at this phase of the fieldwork, as the researcher had the opportunity to precisely analyze the life on the sidewalks after leaving the site and get an overall sense of the environment on the sidewalk at three different times of the day, on weekdays and Fridays. The videos recorded revealed the hidden dynamics of the sidewalk space when used differently at different times of the day, and at different days of the week. Maps of the two streets were adjusted, prepared, and printed on A3 papers. The overall chosen sector of the sidewalks were divided into eight equal segments (sections), according to the existing number of building blocks. This division helped the researcher later on to transform the information recorded by phone to maps and diagrams for analysis and interpretation.

This was the first data collection method used in this research, followed by geo-tagged photography.



**Figure 22 - highlighting the path of the video-recorded walks on the Haroun Al-Rashid and Alexandria sidewalks** Source: Author



#### 4.2.1.2 Geo-tagged Photography

Based on the division of the sidewalks into several sections, the next step for the researcher was to slowly walk along the sidewalks of the study areas, take as many photos as possible to capture the behavior of people on the sidewalk, the different typologies of informal practices, the estimated number of users involved in each activity, and other important information needed for the research. The researcher was able to capture more than 1000 photographs, initially putting in mind that some of these photos might be further used in the analysis diagrams and maps. These photos were captured **by the researcher's** phone in order to have an accurate location of each photo on site for further analysis.

Bateson and Mead found photography helpful for overcoming habitual seeing and limited memory and perspective (Bateson and Mead 1942). Photography is considered one of the most important and reliable visualization tools, as it captures real actions and behaviors. According to Mitchell Duneier, on his book **“Sidewalk”**, he reported that although he spent so much time with Hakim on the sidewalk block, the photographs he captured opened his eyes to things that have been missing out during his years of extensive fieldwork (Duneier, 1999).

#### 4.2.1.3 Initial Notations-Sketches

The researcher was able to draw and write some notes that were obvious to her during the walk, including suggestions for issues that need to be further analyzed and understood in the following methods of surveying. The researcher was also able to write down some important questions that need to be answered through the unstructured and structured interviews. Moreover, the researcher drew some diagrams and sketches of important physical conditions of the sidewalk as well as illustrating significant behaviors and typologies of informal practices. The information included in these sketches were ones that were most of the time only experienced in space, and are difficult to analyze in a comprehensive way without being memorized by hand sketches on site.

#### 4.2.1.4 Coding and counting

Based on the behavioral mapping, the researcher was able to identify the typologies of informal practices existing on the sidewalks of the case studies. These typologies were categorized according to their location, duration of stay,

areas consumed, quantity, their mobility through the day, and number of users involved. The videos recorded on site and the geo-tagged photos helped the researcher to identify the quantity, location, duration of stay of the typologies of informal practices. This will be further explained in the following chapter.

#### 4.2.1.5 Interviews

As mentioned before, the complex phenomena of informal practices of cairo sidewalks was never systematically and scientifically studied before, thus it was crucial to conduct interviews with the different actors involved to be able to find solid answers to the proposed research questions. Structured open-ended interviews were conducted with users of informal practices and residents, while in-depth interviews were conducted with two officers in the municipality. First, the researcher introduced herself to the interviewee, and informed the interviewee of the nature of the study and the title of the research. Then she took an informed consent from the interviewees to record or write down their answers to be used/quoted in the research. Some interviewees preferred to stay anonymous for the sensitivity of their situation, while others did not mind mentioning their names in the research when needed.

##### 4.2.1.5.1 Structured Open-ended Interviews

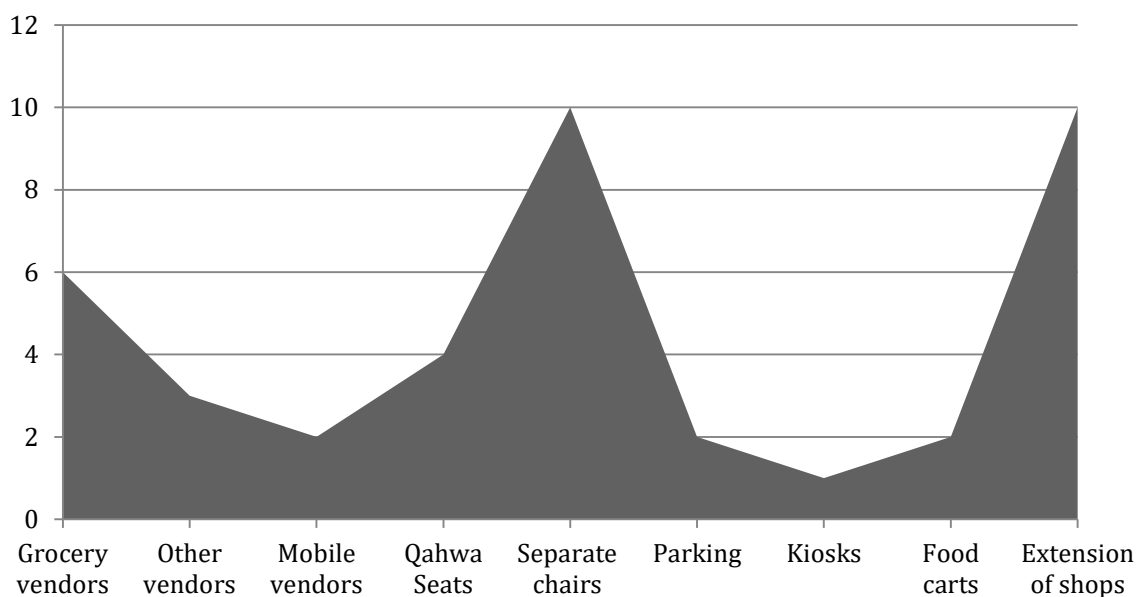
With users of informal practices:

Structured open-ended interviews were conducted with users of informal practices and residence of both streets. The face-to-face conversations helped in the understanding of the motives behind the social and spatial behavior of these users on the sidewalks. Interviews were conducted to answer the questions that the researcher was interested to understand about the dynamics of life on the selected sidewalks, and gather more accurate information that may not have been very clear from the videos and photographs collected on site. Though the interviews were open-ended, allowing the user to take the conversation in new directions, the researcher tried to make sure the questions were answered, in any order.

After obtaining informed consent from the users, some interviews were conducted casually with interviewees and then answers were written down on the spot, while others were voice recorded by phone. Some of the interviewees,

especially the sidewalk vendors, were a bit suspicious about the questions, therefore, the researcher started to conduct them differently and in a more casual manner to get more reliable and valid answers. These interviews were conducted at the three different time ranges of the fieldwork, on weekdays and on Fridays. In order to make sure that the answers taken from the interviewees are reliable, the researcher made sure to pass by the place of the interviewee at different times of the day, and on different days of the week to test the reliability of the information given. The researcher took geo-tagged photos (by Phone) of the interviewees (if possible), or geo-tagged photos of the space where the interview was conducted in order to allocate the location of the interviews on map, and make sure the whole area was covered.

The structured open-ended interviews were conducted with a total of 41 users of different informal practices on the sidewalks and ten residents in both streets. The researcher made sure the selected sample of users of informal practices was not only diverse, but also representative. Therefore, the number of users interviewed was chosen based on the intensity of their existence on the sidewalks (See Fig. 23). Due to the various typologies available, the researcher divided the questions of the interview into two parts: general questions, which suit all kinds of typologies, and specific questions tailored for each type, if applicable (see Appendix A & B).



**Figure 23 - Number of users interviewed in each typology of informal practice** Source: Author

#### 4.2.1.5.2 In-Depth interviews

In-depth interviews were conducted with two employees (police officers) in the municipality. One interview was conducted by phone, and the other was a face-to-face interview. The aim was to understand the roles and rules about the sidewalk space, not only the written laws and codes, but the rules regulating the sidewalk use in action because there is often a conflict between law and practice.

In-depth interviews are usually conducted when the core of the study is not very clear and available data is not enough to be relied on. Therefore, there needs to be a better understanding obtained by digging deep into couple of leading questions (See appendix C) in a casual discussion manner. The results, however, cannot be sophisticatedly analyzed, so the rely becomes on qualitative data. The purpose here is to give the interviewee the freedom to state their own **opinions. That's why, in chapter 6, the results were analyzed in the form of comparing the state official's narratives with the counter narratives of the other users.**

#### 4.2.2 Mapping Perception

In order for the researcher not to impute her own values and interpretations onto the situation, mapping the perception of the different actors involved was crucial. The mixed-use of the sidewalk cannot just be understood and investigated in itself, however, it should also be understood from the beholder of the actors involved; whether users of informal practices, pedestrians, or visitors. Therefore, it represents the mental image of the sidewalk held by the different actors.

*“When designers try to identify universal cognitive models for the environment they mostly reveal their own socialized, cognitive frames. Critical environmental studies have elucidated that spatial perceptions are as socially constructed as the built environment.” (Wood and Fels 2008; Mathur and Da Cunha 2006; Chua, Bolan, and Nisbett 2005; Ratner 1989).*

The interviews conducted with the different actors also played a role in understanding the perception of these actors towards the informal practices on

the sidewalks. However, to make sure the information gathered in the behavioral mapping, field surveys and interviews were comprehensive and reliable, the researcher conducted two methods to map perceptions: online surveys and cognitive mapping.

**Mapping perception was used in the reflection on the findings and results from the behavioral mapping, and interviews; therefore, the perception of users was not tested and investigated in depth, but rather as a new tool of investigating/confirming the findings, to get reliable and valid outputs.**

#### 4.2.2.1 Online Survey

An online survey was published on Facebook and other channels of social media. It was directed to visitors/ residents of *Midan Al-Gamea'*. The purpose of this tool was to understand the perception of residents and visitors towards these informal practices observed on the sidewalk and compares it to the initial findings. The online survey included 9 multiple-choice questions, and 1 open-ended question. 50 respondents filled out the survey **(See appendix D)**

#### 4.2.2.2 Cognitive mapping

Being interested in understanding the perception of the users performing these informal practices on sidewalks as well as the perception of pedestrians towards these practices, another tool of investigation was used after conducting the behavioral mapping and the field surveys, which is: Cognitive Mapping. This method was used as a new tool of investigating the informal practices on Sidewalks.

Perception of the pedestrians and users practicing these activities was shown from the literature to play an important role in affecting the spatial manifestations of these practices on sidewalks. Therefore, cognitive maps were used to reflect on the findings and results from the behavioral mapping, interviews, and surveys.

The cognitive mapping was conducted with 10 users of informal practices and 10 pedestrians/residents. Participants were asked to draw a sketch of how they remember and would describe the life on the sidewalk they are using. This personal view/ record has the focus on perception of space based on memory, experience, personal circumstances and current concerns.

The sheet given to participants to draw on was blank. Participants were **completely free on how to draw a “map”**. **The only rule is not to copy** it from a street map or image. The focus lies on the content and not the beauty of the sketch, there is no right or wrong. The key is that the sketch is not copied from a map or image but rather drawn from memory.

However, as it was mentioned earlier in the literature review that cognitive mapping is challenging in many different ways since it depends on talents and skills that might not exist all the time:

*“The overall mental image will be: partial; not covering the whole city, simplified; excluding a great amount of information, idiosyncratic; every individual’s urban image is unique, and distorted; based on subjective, rather than real, distance and direction (1973). Therefore, people behave in the world “as they see it”- whatever the flows of cognitive maps, they are the basis for spatial behavior. (Downs & Stea, 1973, p.22)*

This description of cognitive mapping was very evident in the drawn cognitive maps by the different users, which will be explained later in chapter seven. For the purpose of the research, the conducted maps were only visually analyzed and **the only important things related to the research focus were investigated and analyzed in relation to the other findings**. While there are many other factors and points of investigation related to cognitive mapping, according to literature, they were neglected due to their irrelevance to the purpose of the tool and the scope of work.



## Chapter 5

## 5 Data and Primary Findings

In this chapter, the purpose is to present the primary data collected, including the site analysis of the two case studies: Haroun Al-Rashid and Alexandria Streets, and most importantly the patterns of uses of the studied sidewalks. It was important to briefly reflect on the historical background of Heliopolis, the development of commercial uses of the area of the case studies, and the physical and social analysis of the two streets in specific. Most importantly, this chapter includes the taxonomy of the typologies of informal practices on the sidewalks of both streets as a starting point for the following analysis. These practices were coded, counted, and allocated on map to reflect on the areas consumed by each typology.

### 5.1 Site Analysis

#### 5.1.1 Brief historical background- Heliopolis urban Development

The Belgian Baron Empain originally planned the suburb of Heliopolis in 1905, where his intention was to establish a modern city in the desert outside the crowded town of Cairo (Dobrowolska & Dobrowolski, 2006). Heliopolis Oasis Company (HOC) initially planned two oases (see fig. 24). The first oasis (*Heliopolis*) was considered as the luxurious neighborhood, while the second oasis (eastern oasis: *Almaza*) was planned to house the workers residencies, workshops, transportation utilities and the mosque (AbdelAziz, 2007). It might be interpreted that the initial plan reflects a form of social segregation between the high and low-income classes, or as an ethnic isolation between the Egyptian Muslims and the foreigners (Alhowaily, 2015). However, it might also be valid that Baron Empain envisioned the first oasis as a touristic settlement to attract foreigners, and create a profitable real estate economics, while the second oasis as **“behind the scene” for the population supporting the growth of Heliopolis.**



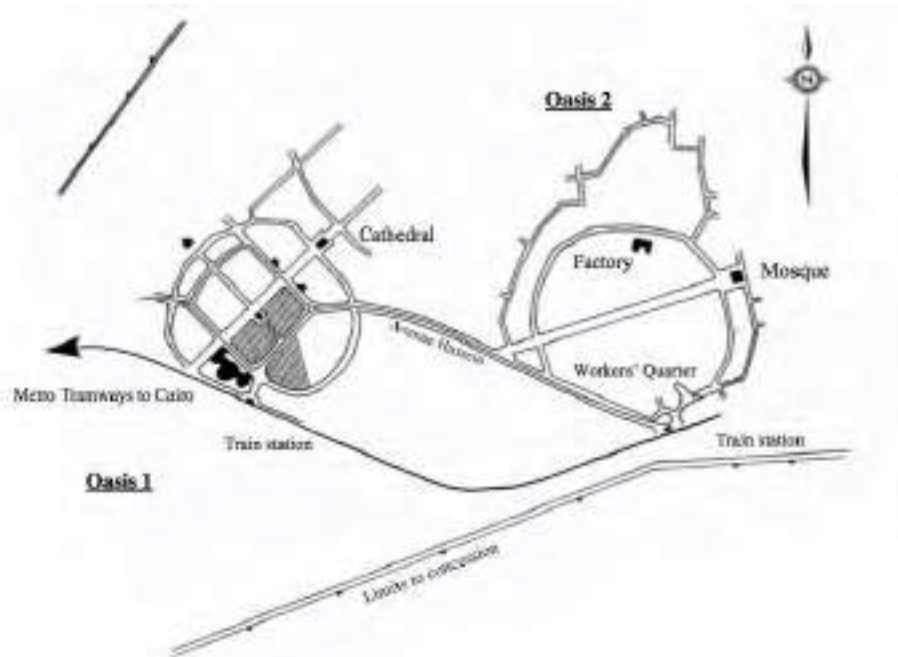
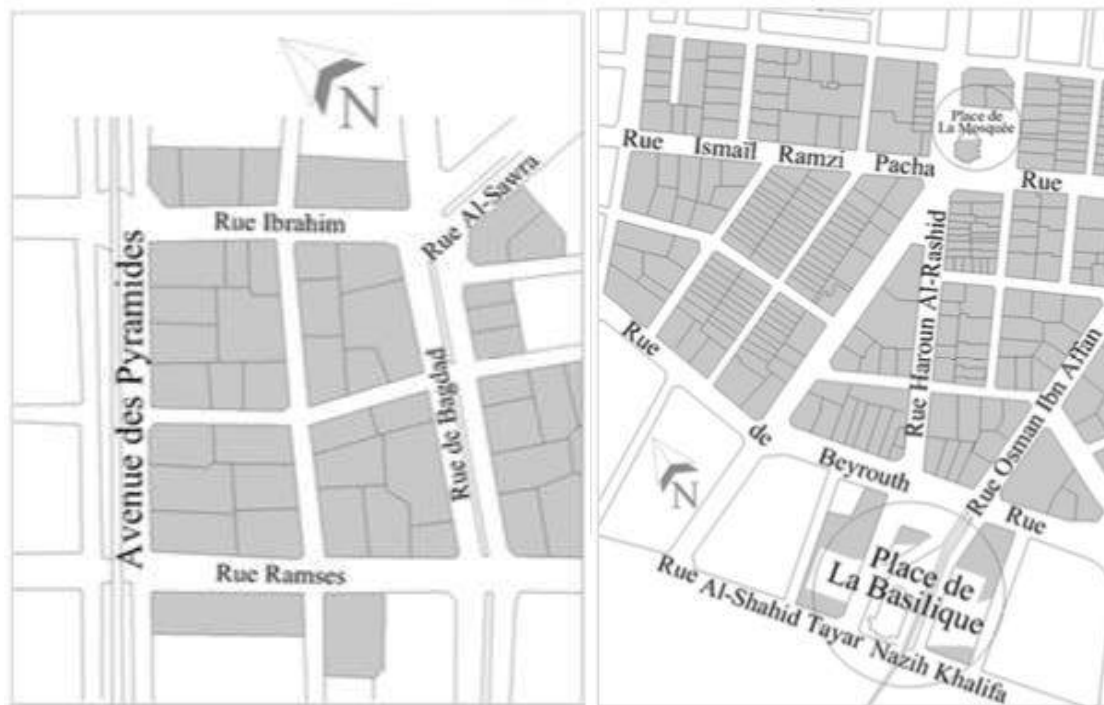


Figure 24 The initial project layout in the form of two Oases (Ilbert, 1981, p.61)



Figure 25 The city Heliopolis General Plan, 1930 Source (Ilbert, 1981. P 69)

However, in 1909, the initial plan showed the two oases merged together (see fig. 25). Because of the financial problems in 1907, the two oases were merged, while the focus of development was concentrated in the *luxurious* oasis to achieve maximum benefit from the existing infrastructure for maximum profit (Alhowailly, 2015).



**Figure 26 On the left, plot divisions in the elite neighborhood, on the right, plot division of the indigenous neighborhood (AbdelAziz, 2007)**

### Al-Bustan Zone

If we were to compare the plot divisions in both neighborhoods, it can be clear that the rich neighborhoods of the city were characterized by somehow large square plots, while the popular and indigenous neighborhoods were endowed with a narrower plot (see fig.26). The indigenous neighborhood (Al-Bustan today), was designed as the popular part of the city (See fig. 27). Al-Bustan administrative zone, which includes now : Haroun Al-Rashid St. (Rue San Stefano in the past) and Alexandria St. was completely completed before the nationalization of the Company. In 1961, it has 34,000 inhabitants with a density of 280 ha/hectare, it included economic housing near the mosque, handicraft workshops in Aswan Street, shops, a cinema and schools (AbdelAziz, 2007).



Figure 27 - The zoning of the different social classes in Heliopolis (AbdelAziz, 2007)





Figure 28 - Entrance to Rue San Stefano (Haroun Al-Rashid St. today), 1931 Source:  
<http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html>



Figure 29 - San Stefano Street (Haroun Al-Rashid St. today) Source:  
<http://www.genialogic.de/de/bilder/%C3%A4gypten-historische-bilder-und-ansichtskarten/kairo-historische-ansichtskarten.html>

The building density in Al-Bustan zone increased gradually until it reached its **peak in the Sadat's era (1970-1981)**. *Midan Al-Gamea* was the only dominating **commercial activity in the monarchy's era (1905-1952)** (See fig. 30) (Ain Shams University, 2015). **Later, in Nasser's era, more commercial nodes appeared** (see fig. 31). Commercial uses started to increase and take place during the **Nasser's era (1952-1970)**, only in small portions (10%). **Then in Sadat's era (1970-1981)**, the openness policy led to the increase in land value, so it was the beginning of demolishing of many of the old buildings and building high buildings instead (Ain Shams University, 2015). **There wasn't** a defined and coherent architectural style, the skyline became distorted due to the existence of new high buildings, and even the facades became poor due to the lack of ornaments and details. As a result of the Economic openness Policy most of the villas were demolished & replaced by residential buildings (from 7 to 8 floors). Some owners of buildings added more floors regardless the shape or colors of the façade, resulting in a clear decrease in the area of open spaces with respect to the buildings. The density of commercial activities increased (15%) in the **Sadat's Era, mainly in Haroun Al-Rashid Street and Othman Ibn Affan Street** (See fig. 31). The neighborhood started to accommodate more commercial **activities in Mubarak's Era (1981-2011)** (see fig. 32). In 2011, post the January revolution, the commercial uses increased to approximately 18%. It can be clear from the map that the intensity of commercial uses increased and extended to Alexandria St. as well (See fig. 33).

This overview shows how the study area for this research has transformed and evolved through the years as one of the significant commercial nodes in Heliopolis. However, it can be clear in the maps that Alexandria Street was never a commercial street, until the district deteriorated and the density of **commercial uses began to increase in Sadat and Mubarak's era. One important** factor behind the increase in commercial uses might be the removal of the tramline from around the mosque (see fig. 33) the path of the tram was moved **to Othman Ibn Affan Street in Nasser's Era.**

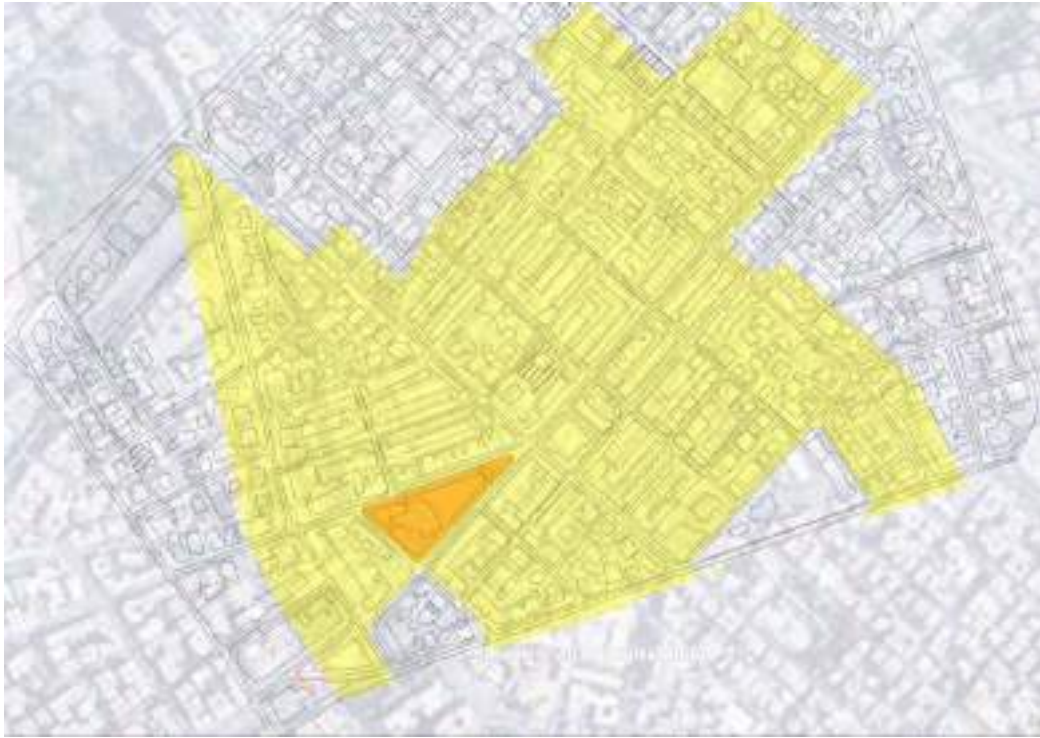


Figure 30 - Commercial activities in the Monarchy Era (1905-1952) (Ain Shams University, 2015)

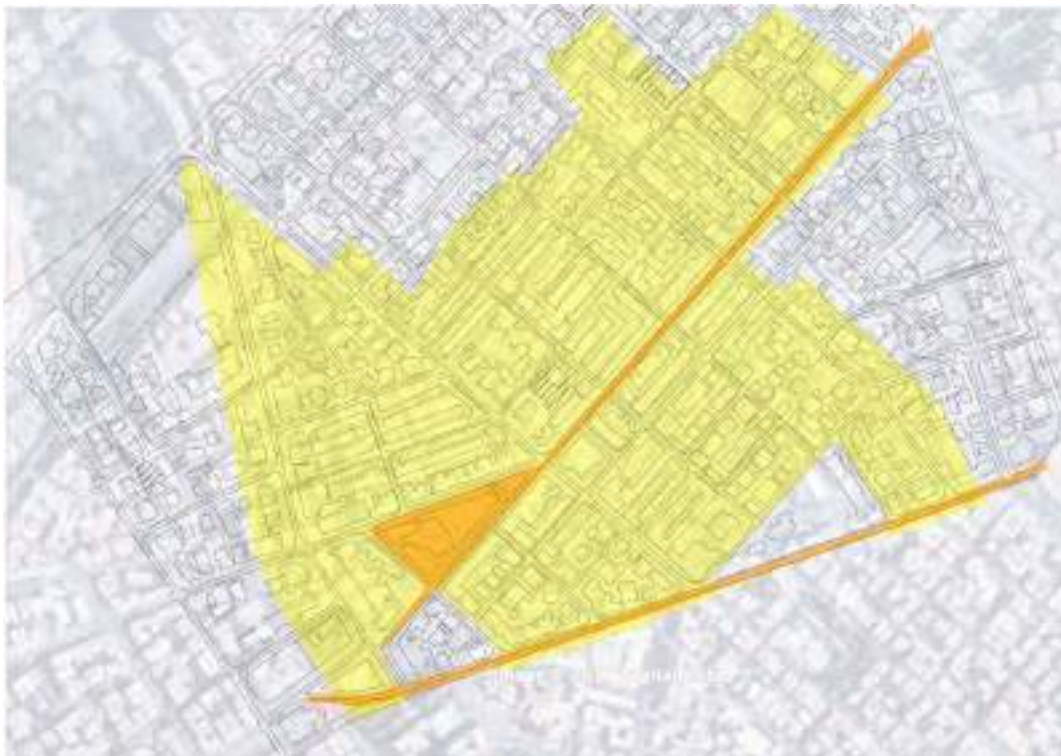


Figure 31- Commercial activities in Nasser Era (1952-1970) (Ain Shams University, 2015)





Figure 32 - Commercial activities in Mubarak's era (Ain Shams University, 2015)

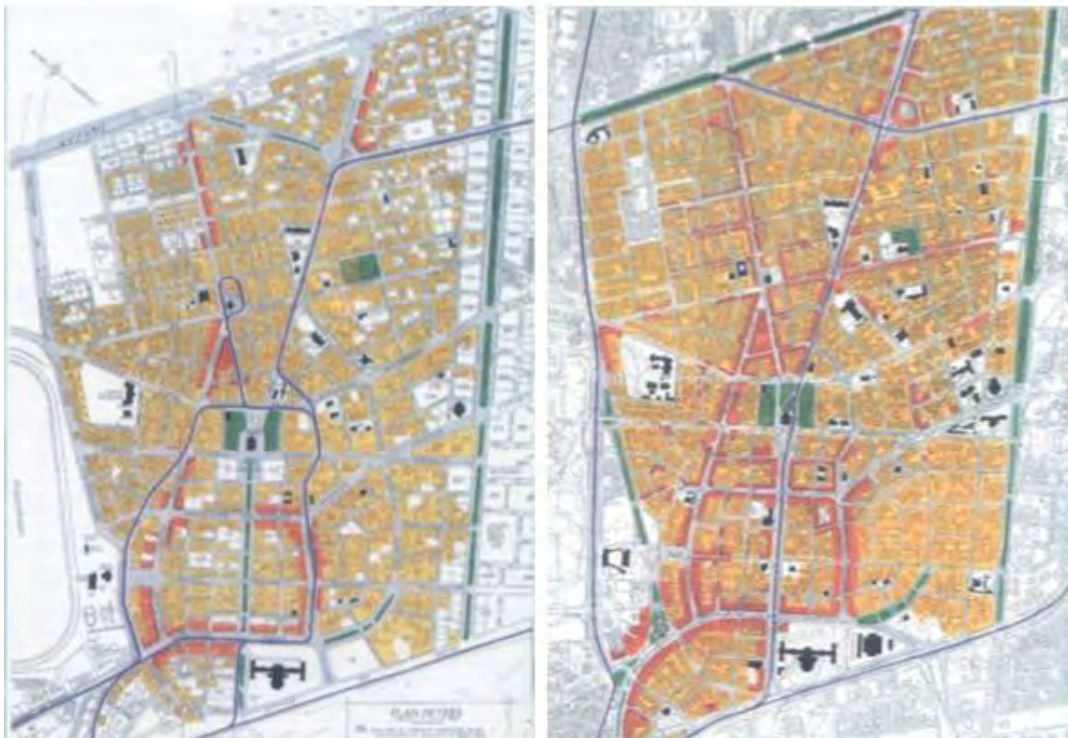


Figure 33 - Increase in density of commercial activities in Heliopolis, from 1973 to 1999 (AbdelAziz, 2007)

The district has been exposed to several dramatic changes on many levels. Concerning the physical level, as shown in figures 34, 35, 38, 39, there are basic changes that happened to Heliopolis in general, the absence of electric tramline, and the distortion of the architectural theme by individualistic actions, which led to the overall deterioration of the area.





Figure 34 Covered Market Building in Midan Al-Gamea (IFE, 2005)



Figure 35 Area of covered Mosque today. Source: Author



Figure 36 - The Mosque Square, 1910 (Usbpanasonic, 2013)

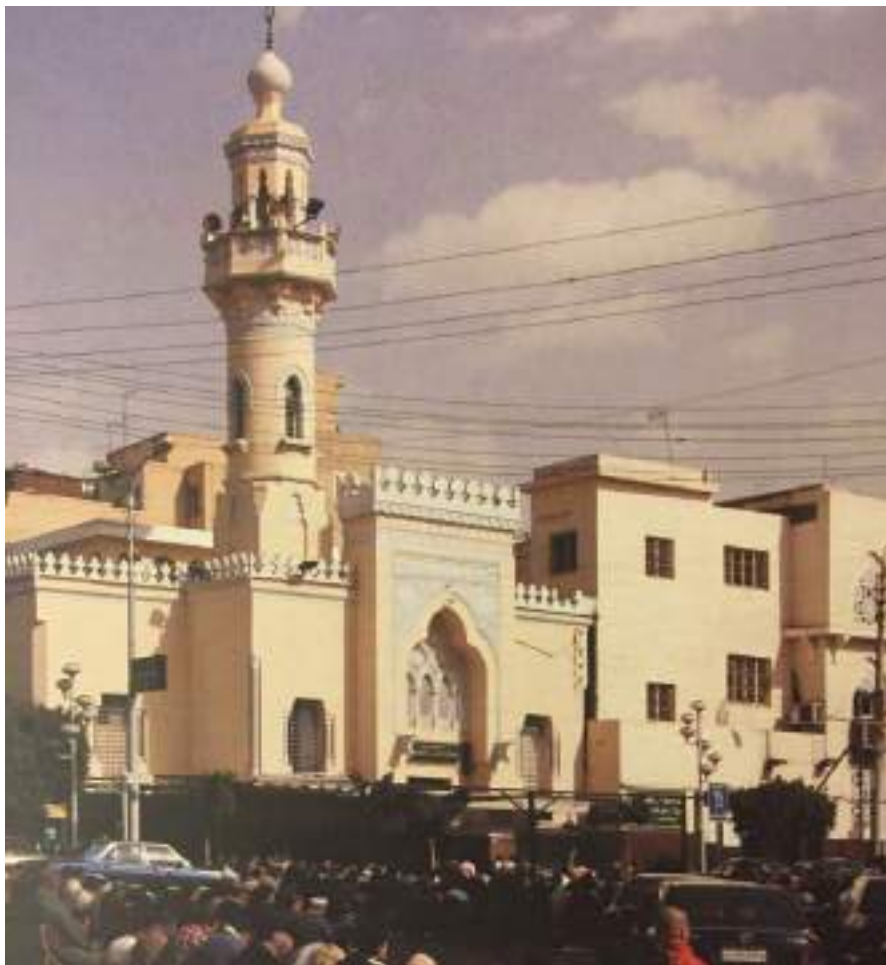


Figure 37 - Gamal Al-Din Al-Afghany Mosque (Dobrowolska & Dobrowolski, 2006)

The lowest category of lodging were two types: the bungalows for workmen, **and the units of “indigenous quarter”** (*Dobrowolska & Dobrowolski, 2006, p.120*). In the current district of the mosque (formerly the indigenous city), it is very difficult to distinguish the type Garden City or the bungalows: these buildings are raised, shops are added in the courtyards of buildings as well as in the gardens and on the ground of the road. The old buildings completely transformed.



Figure 38 - Rue San Stefano, 1911. (Rafaat, 1997)





Figure 39 - Rue San Stefano (Usbpanasonic, 2013)



Figure 40 - A building in Midan Al-Gamea in 2007 (AbdelAziz, 2007)

Referring to the informal practices in public spaces of Heliopolis, it was important to refer to, some historical photos to understand the development of the phenomenon in the area.



Figure 41 - Small kiosk in Heliopolis, 1953 (Church)



Figure 42 - Street vendors in Heliopolis (Church)





Figure 43 –Vendor from the village in the streets of Heliopolis (Church)



Figure 44 (Church)

### 5.1.2 Case Studies: Haroun Al-Rashid and Alexandria Streets

The two selected Case Studies; Haroun al-Rashid and Alexandria Streets are located in Al-Bustan administrative zone. This zone, as mentioned above, was designed as the popular part of the city Heliopolis. It was designed to host the residencies for workers, workshops, and other services. Comparing the historical characteristics of this area to its characteristics today, one can find that the complexity of the commercial activities had become more evident, restructuring the urban fabric of the city on many levels.

In order to develop a better understanding of the transformation that happened to the life on the sidewalks of both streets, the author selected some quoted narratives that easily describe the area of *Midan Al-Gamea*:

***“Heliopolis is not economically segregated, however. Similarly picturesque vegetable markets and workshops can also be found a few steps from the expensive shops in the district’s core, while jewelers have taken over shops across from the old market among the fish and poultry. There, village women sell vine leaves, garlic, limes, and okra on the sidewalk in front of shops dealing in diamonds. Still, the chic shops have always nestled beneath the colonnaded arcades of Heliopolis’s main streets: boulevard Abbas (Ibrahim lakkany St.), boulevard Ismail (Baghdad St.), and boulevard Ibrahim (whose name for some mysterious reasons remains unchanged)***

*-(Dobrowolska & Dobrowolski, 2006, p.182)*

***“Midan Al-Gamea is Heliopolis’ famous enormous flea market. My first visits to this market started when I went along with my grandma whenever she needed to buy housewares, jewelry or even fresh vegetables and fruits. This disordered part of Heliopolis has everything you can imagine, from fish, chicken and fabrics to light bulbs and doorknobs. There is even a mosque right in the middle of the square. Chaos is the theme of the place, usually because of all the people walking around everywhere and shouting, but I guess that’s all part of the experience.”***

*–(Amr, 2016)*

The two case studies (streets) are both adjacent to the two sides of the Mosque. The two streets are very close to each other, with an approximate distance of 50 meters in between. Both streets are almost the same length; Haroun Al-Rashid Street (900 m) is only 100 meters longer than Alexandria Street (800 m). However, Haroun Al-Rashid is a main commercial street; average 15 meters wide, while Alexandria is a residential secondary street; average 8 meters wide. Therefore, each street has its unique physical structure and urban characteristics. The focus on this research is on the highlighted sidewalk spaces of these two streets in the following map; which is 10,700 m<sup>2</sup> in Haroun Al-Rashid, and 4,280 m<sup>2</sup> in Alexandria Street. The sidewalks of Haroun Al-Rashid St. are 3-6 meters **wide, while Alexandria St.'s ranges from** 1-3 meters wide. Haroun Al-Rashid Street is a vibrant commercial street, **buildings' ground floors is fully occupied with shops and workshops of different** purposes, and the wide sidewalks are most of the time crowded with informal practices like street vending, sitting, **parking, and oriental coffee shops' setting.** However, Alexandria Street is more residential, with less number of shops on the ground floor, narrow sidewalks, and less intense informal practices on its sidewalks. There are many shops spaces that are closed and displayed for rent or sale. As mentioned above, Alexandria Street included various income groups, not only the popular class like Haroun Al-Rashid.





Figure 45 - Bustan Zone: highlighting the case studies- Haroun Al-Rashid & Alexandria St. Source: Author



Figure 46 - Zooming in to the two case studies: haroun al-Rashid Street and Alexandria Street Source: Author

Therefore, the traffic density in Haroun Al-Rashid St. is higher, where there are usually parked cars on the sides and three lanes for vehicular circulation in the middle. In Alexandria St., the traffic density is less due to the physical structure of the street and its residential nature. There are usually parked cars on the two sides and one lane for vehicular circulation. For the building heights, as shown in figures 47, 48, it is clear that the old buildings in both streets are almost of the same height/ number of floors, however, in Haroun Al-Rashid St., high-rise buildings and towers replaced some of the old buildings, which reflects the deterioration that happened to the area.



Figure 47 - Haroun Al-Rashid Street Today Source: Author



Figure 48 - Alexandria Street Today Source: Author

#### 5.4 Patterns of uses: Mixed-Used Sidewalks

In this section, the purpose is to overview the primary findings from the behavioral mapping (mapping reality) of both streets during weekdays and Fridays, at three different times of the day. It includes the basic taxonomy of the typologies of informal practices taking place on the selected sidewalks, quantitative data representing the maximum total areas consumed by each typology per street, identifying the factor of duration of stay and location on the sidewalk regarding each typology, as well as the allocation of typologies on the sidewalk spaces of both streets. The typologies identified in this chapter are the ones taking place in the studied sidewalk areas; however, there are other various typologies of informal practices that take place in many of the other sidewalks of Cairo in other contexts.

Total areas of studied sidewalks:

The total sidewalk area of Haroun Al-Rashid Street: 10,700 m<sup>2</sup>

The total sidewalk area of Alexandria Street: 4,280 m<sup>2</sup>

According to the typologies observed on both sidewalks, they were categorized accordingly (see fig. 49):

- Merchandise: which included the *grocery vendors*, *food carts*, *extension of shops* to the sidewalk, *kiosks* and *other street vendors* (textile, loaf, toys, or clothes vendors).
- Services: which included *shoe polishing* and *workshop repairing* areas on the sidewalk.
- Parking: which included the parking of *motorcycles* and *bikes* on the sidewalk.
- Leisure: which included the Qahawy's *seating* placed on the sidewalk, and the *separate chairs and tables* used by salesmen and shop owners.
- Static furniture: which included objects placed either by shop owners or residents, such as: *water coolers*, *signs*, *malfunctioning objects*, and *drainage buckets*.

- Infrastructure: which included static objects placed by the municipality on the pedestrian walking space, such as: the tunnel ventilation rooms and electricity rooms.

The identified practices were also categorized according to their spatial, economic/functional, and socio-cultural dimensions. Moreover, it was important for further investigation in the following chapter to identify the *Dynamic* and *Static* typologies. *Dynamic* refers to typologies that actively involves more than one user, and includes movable furniture/ objects. However, *Static* refers mostly to fixed objects/furniture on the sidewalk, whether placed by the community or the government (infrastructure). For example, it was clear that very few dynamic practices exists on the sidewalks of Alexandria St. (see fig 49)

Since the focus of this research is on the spatial patterns of informal practices on the sidewalks, it was important to first, identify the maximum total areas occupied by each typology on the sector of studied sidewalks, which was calculated based on the average quantity of each typology per day and the average area consumed (See table 1). These numbers (areas in square meters) helped in estimating the percentage of pedestrian and non-pedestrian uses on both sidewalks as well as the percentage of area consumed by each category, to be further analyzed and investigated within the analysis of the findings. The information given in this table was collected from the behavioral mapping and the interviews conducted with users of informal practices.

It was also important for the scope of this research to briefly reflect on some basic spatial patterns that were observed during the fieldwork such as the permanency and temporality factor for each typology, the level of mobility, and their location on the sidewalk (See tables 2 &3). *Permanent* practices are the ones that are placed in the same place on the sidewalk throughout the day, every day. However, *temporary* practices are the ones that change their location of stay on the sidewalk space throughout the day, depending on other factors.

The analysis presented in the following chapter is based on the data presented in this section. They work as a base for building the knowledge that will be developed through the spatial analysis and the in-depth understanding of the phenomenon in the chosen case studies.



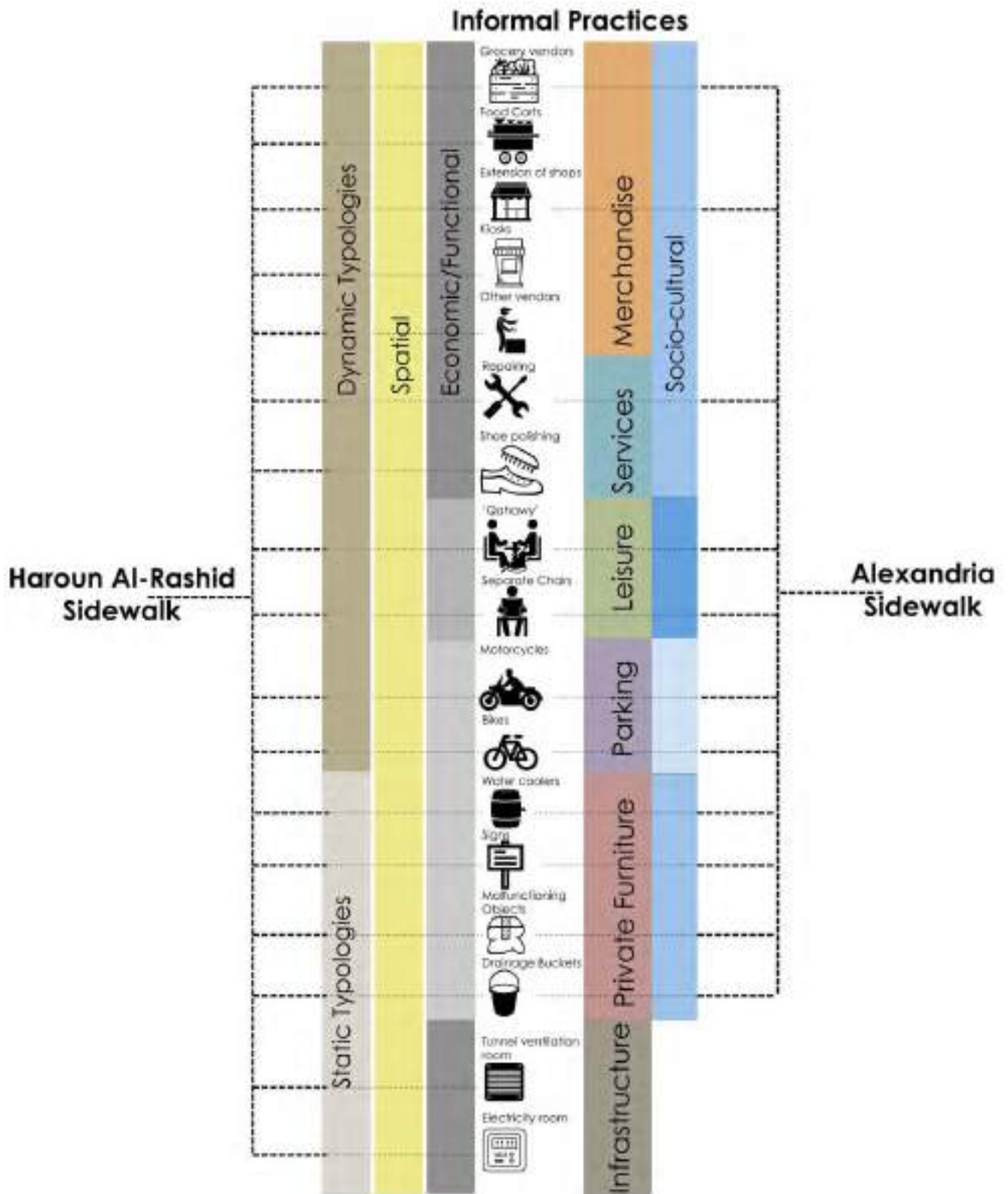


Figure 49 –Categorization of typologies Informal Practices Source: Author

















	Merchandise					Services		
								
Max. Total Area in 2 streets (m2)	1050	100	2130	20	500	280	10	
Percentage from total area of Haroun Al-Rashid sidewalk (%)	10 %	1%	20%	0.2%	5%	2%	0.1%	2
Percentage from total area of Alexandria sidewalk (%)	1.3 %		3%			1%		:
Maximum total area consumed per street (m2)								
Haroun Al-Rashid St.	1000	100	2000	20	500	200	10	2
Alexandria St.	50		130			80		4
Average area consumed on weekday (m2)								
Haroun Al-Rashid St.	500	70	800	20	200	200	10	2
Alexandria St.	50		130			70		4
Average area consumed on Friday (m2)								
Haroun Al-Rashid St.	1000	100	2000	20	500	100	10	2
Alexandria St.	20		100			80		3
User Count on weekday (per day) Male / Female								
Haroun Al-Rashid St.	20/ 40	28/ 2	4/36	35/5	6/6	10/1 0	15/0	1,
Alexandria St.	5/35		5/15			5/10		1,
User Count on Friday (per day) Male / Female								
Haroun Al-Rashid St.	40/ 40	40/0	20/4 0	45/5	5/10	15/1 0	20/0	1,
Alexandria St.	50/10		10/1 0			10/1 0		1,
Quantity on weekday (per day)								
Haroun Al-Rashid St.	15	15	150	1	40	10	3	4
Alexandria St.	4		20			5		2
Quantity on Friday (per day)								
Haroun Al-Rashid St.	40	20	200	1	20	6	3	3
Alexandria St.	5		10			3		2

Table 1 Calculating the maximum areas consumed by each typology Source: Author

	Parking		Leisure		Static Furniture				Total
									
	650	50	600	400	140	100	240	8	6,300
	2.5%	0.3%	5%	3%	1%	0.6%	0.6%	0.04%	51.3%
	10%	0.5%	2%	2%	1.2%	1%	5%	0.2%	27.2%
	250	30	500	300	100	60	40	4	
	400	20	100	100	40	40	200	4	
	250	30	400	200	100	60	40	4	
	400	20	100	100	40	40	200	4	
	200	10	500	300	100	60	40	4	
	300	10	80	100	40	40	200	4	
	1/0	1/0	15/0	200/0	50	-	-	1	
	1/0	1/0	10/0	100/0	20	-	-	1	
	1/0	1/0	30/0	290/10	30	-	-	1	
	1/0	1/0	20/0	100/0	20	-	-	1	
	40	5	6	200	50	60	10	7	
	25	4	1	100	15	40	100	6	
	30	5	6	300	50	60	10	7	
	25	4	1	100	15	40	100	6	



Typology	Permanently placed	Temporarily placed	Stationary	Mobile	On sidewalk			Off sidewalk
					Shops side	Middle	Street Side	
Dynamic Practices								
Merchandise								
Grocery vendors								
Mobile vendors								
Extension of shops								
Kiosks								
Food carts								
Other Vendors:								
Newspapers vendors								
Textile/roof vendors								
School supplies/ toys vendors								
Leisure								
Gahwa Seats								
Separate chairs & tables								
Parking								
Motorcycle parking								
Bike parking								
Services								
Shoe polisher								
Workshop (repairing)								
Loading supplies								
Static Practices								
Private Furniture								
Water coolers								
Malfunctioning Objects								
Buckets								
(clearing/drainage)								
Advertising signs								
Infrastructure								
Electricity Rooms								
Tunnel Ventilation Room								

Table 2 Duration & location of stay of informal practices on the sidewalks of Haroun Al-Rashid St. Source: Author

Typology	Permanently placed	Temporarily placed	Stationary	Mobile	On sidewalk			Off sidewalk
					Shops side	Middle	Street Side	
<b>Dynamic Practices</b>								
<b>Merchandise</b>								
Grocery vendors								
Mobile vendors								
Extension of shops								
<b>Leisure</b>								
Gahwa Seats								
Separate chairs & tables								
<b>Parking</b>								
Motorcycle parking								
Bike parking								
<b>Services</b>								
Workshop (repairing)								
<b>Static Practices</b>								
<b>Private Furniture</b>								
Water coolers								
Multifunctioning Objects								
Buckets								
Advertising signs								

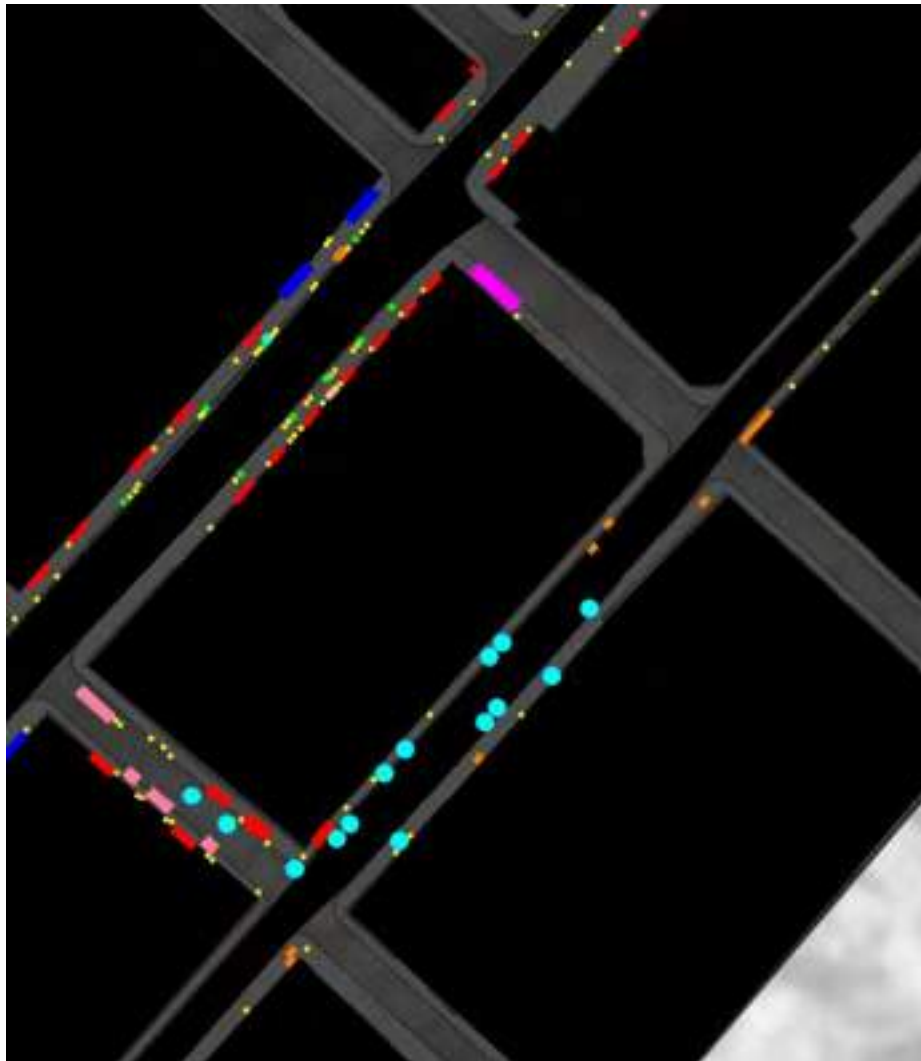
Table 3 Duration & location of stay of informal practices on the sidewalks of Alex St. Source: Author

One underlying aim of this research was to overcome the habitual seeing of this phenomenon on the sidewalks, and to emphasize on the importance of closely looking on the sidewalk spaces of the city. Therefore, the identified informal practices were allocated on the sidewalk spaces map of the two streets based on the geo-tagged photography and the recorded videos of the walks on the sidewalks of Haroun Al-Rashid and Alexandria Streets (See fig.50). The allocation of the practices was done with the objective of understanding their dynamics and their spatial arrangement within the urban fabric. Further investigation of the factors affecting these patterns will be explained in the following chapter.



**Figure 50 location of permanent & stationary informal practices on the sidewalks of Haroun Al-Rashid and Alexandria Streets. Source: Author -**

For example, in this zoomed-in map (See fig. 51), it shows the difference in the intensity of the informal practices on both sidewalks. As shown, in Alexandria St., the zone where there is an accumulation of parked motorcycles is located on the sidewalk space adjacent to the hospital. However, there are very few separate chairs and some malfunctioning objects on the rest of the sidewalk space. This zone of Alexandria St. is mostly residential. On the other hand, Haroun Al-Rashid Sidewalks are accumulated with various types of informal practices, including extension of shops, water coolers, separate chairs and tables, food carts, and many others as identified on the maps. The tertiary narrow streets connecting both streets, which are around 50 meters apart, are most of the time accumulated with informal practices on their sidewalks, and fade away towards Alexandria St.



**Figure 51** Zoom-in map showing the location of typologies around on block. Source: Author

# Chapter 6

## 6 The Unmapped Dynamics: Behind the Maps

In this chapter, the aim to analyze the data collected from the different data collection methods: behavioral mapping, field surveying, and interviews with **users. It represents the researcher's interpretation towards the understanding** of the phenomenon. In an attempt to reach comprehensive answers regarding the research questions, this chapter will be analyzing the impact of the following factors on the existing spatial patterns of informal practices in the case studies: Adequate sidewalk space, space-time factor, active and passive facades, the edge effect, and the multiplier effect.

### 6.1 Understanding the root causes

#### 6.1.1 Understanding the impact of adequate sidewalk space

##### *6.1.1.1 Impact on sidewalk zoning*

Despite the fact that Haroun al-Rashid is a commercial street, accumulated with more informal practices than Alexandria Street, which is more residential, the walking experience reflected a contradictory phenomenon. When comparing the pedestrian movement in both streets, a pedestrian can sense the order of the space within the overall picture of chaos and informality on Haroun Al-Rashid sidewalks more than on Alexandria sidewalks. On Haroun Al-Rashid sidewalks (3 to 6 meters wide), which are wider than those of Alexandria Street (1.3 meters wide), total movement obstruction can often be avoided due to the better organization and appropriation of territories. However, it becomes a challenge on the narrow sidewalks of Alexandria Street. When any informal practice takes place on its sidewalks, the pedestrian movement is completely blocked, and pedestrians are obliged to pass through the street (See figures 52&53).

There were three distinct zones of activities observed on the sidewalk of Haroun Al-Rashid. The first zone was along the edge of the shops on the ground floor. This zone was essentially used by pedestrians for entering and exiting of shops, window-shopping, checking the displayed products, or reading signs displayed by shops. In this zone shop owners/salesmen display their products on the sidewalk, place their chairs and tables to sit and read newspapers, drink

tea, socialize with their colleagues, or register the cash from the clients. Very few mobile vendors and beggars occupy this zone. This zone can be considered as the most private zone on the sidewalk; mostly owned by the shop owners. Not only that, but also the *Qahawy* display their tables and chairs for clients in this zone, along the edge of the building.

The second zone is primarily for pedestrian movement, however, in this case, it is most of the time used by clients to stop for shopping, chatting, or bargaining with the shop owners about the prices. Moreover, it is sometimes used by mobile vendors, targeting the pedestrians on the sidewalk. In case of Haroun Al-Rashid, the second zone is not very clearly defined all the time, however, it depends on the density of pedestrians, clients, and other informal practices occupying the space at the same time.

The third zone is used to perform the majority of the dynamic and static informal practices observed on the sidewalk, such as owners/salesmen sitting under the tree shade, street vendors, coffee shops settings, or shops spilling over their products on the sidewalk. It also accommodates some static practices like parked motorcycles and bicycles, garbage bins, water coolers, and cleaning utensils belonging to the shops. Therefore, this zone is the most richly furnished with street furniture and other objects including fixed light poles, trees, and signposts. The boundaries of this zone varies along the length of the sidewalk, it sometimes extends to occupy parking spaces.

However, in Alexandria Street, it is difficult to divide the sidewalk space into clear zones of activities. The sidewalk is very narrow; it can hardly accommodate three zones of activities. Therefore, zone 1 and 3 are merged together, which most of the time completely blocks the pedestrian movement on the sidewalk. So, in this case, zone 3 completely disappears and can hardly be defined.



**Figure 52** The three identified zones on the sidewalks of Haroun Al-Rashid St. Source: Author





Zone 1 + 2 + 3

**Figure 53 No clear zoning identified on the sidewalks of Alexandria St. Source: Author**

As it was mentioned above in table 2, the majority of the informal practices on the sidewalks of Haroun Al-Rashid, are permanently located in zone 3 and they most of the time extend their territories to the street to leave a sufficient space for pedestrians to walk in the middle zone of the sidewalk (see fig. 54, 55). The few temporary street vendors located in zone 1, usually occupying a smaller space. However, as shown in Table 3, most of the informal practices on Alexandria sidewalks occupy the 3 zones of the sidewalks, and even extend beyond its premises due to the narrowness of the sidewalk. The few vendors in Alexandria Street are located temporarily off the sidewalk boundaries; for example, grocery vendors locate themselves in between parked cars temporarily throughout the day. (see fig. 56,57 )



Figure 54 Grocery vendor in zone 3, Haroun Al-Rashid Sidewalks. Source: Author



Figure 55 Separate chairs in zone 3, Haroun Al-Rashid sidewalks. Source: Author

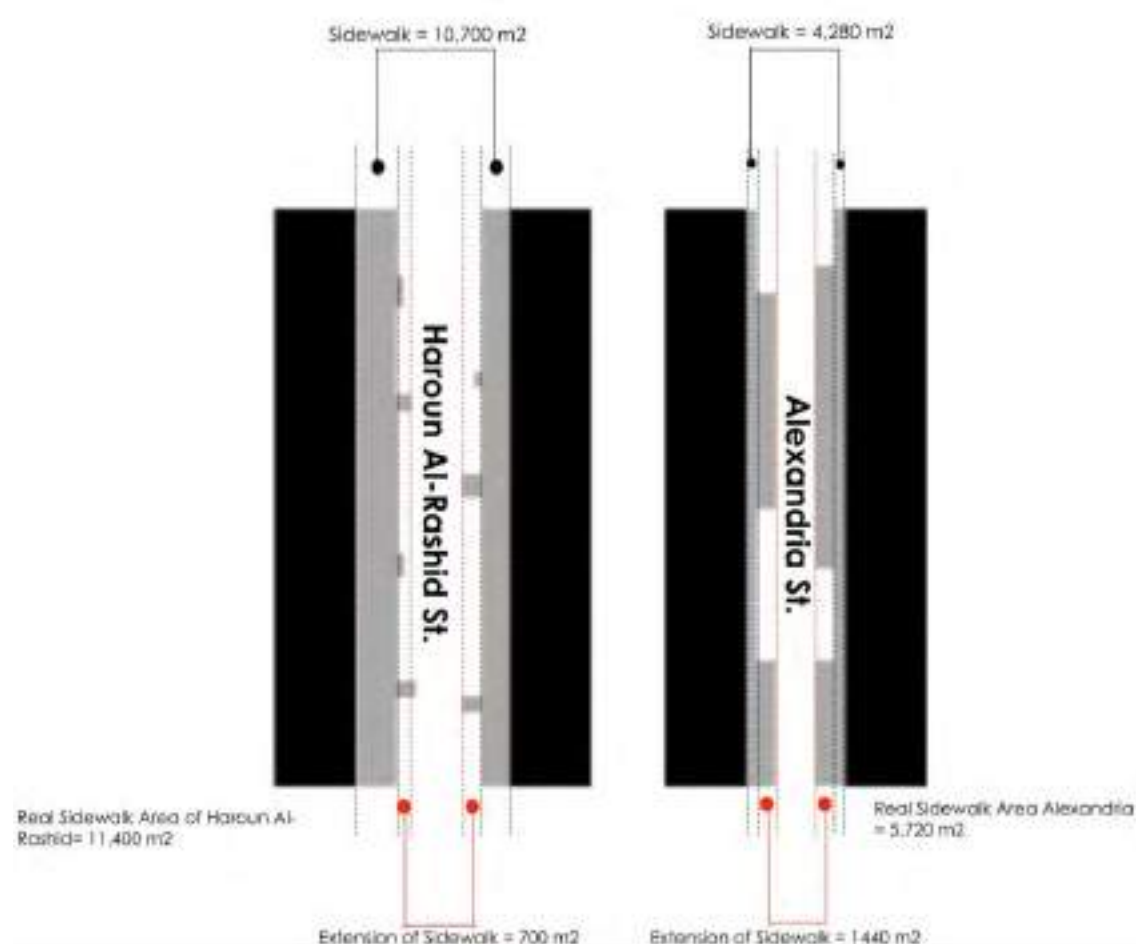


Figure 56 Temporary located vendors off the sidewalks of Alexandria St. Source: Author



Figure 57 Extension of shops blocks the movement on sidewalks of Alexandria St. Source: Author

Therefore, this shows that the real boundaries of the sidewalk in both streets sometimes extend to approximately 2 meters maximum beyond the real physical boundaries of the sidewalk. However, in Alexandria Street, there is more extension beyond the real boundaries of the sidewalk due to its very narrow width (see fig. 58). The third zone is usually subjected to change depending on the sidewalk size. For example, the actual studied sidewalk area of Haroun al-Rashid is 10,700 m<sup>2</sup>, and the additional area is approximately 700 m<sup>2</sup>. Therefore, the total sidewalk area is 11,400 m<sup>2</sup>. However, the actual studied sidewalk area of Alexandria is 4,280 m<sup>2</sup> and the area of extension to the sidewalk is approximately 1440 m<sup>2</sup>, so the total sidewalk area used is approximately 5,720 m<sup>2</sup>.



**Figure 58 Real Boundaries of the sidewalks of Haroun Al-Rashid and Alexandria St. Source: Author**

#### 6.1.1.2 Impact on pedestrian movement

As mentioned previously, the sidewalk is defined in this research as an item for separating the pedestrian movement from the vehicular circulation, however, pedestrians tend to rarely maintain their walk in the sidewalks (See fig. 59). The previously defined zoning of activities on the sidewalk directly affects the movement of pedestrians on both sidewalks. For example, the pedestrian movement is more consistent on Haroun Al-Rashid sidewalks than on Alexandria sidewalks, and pedestrians have more chance to maintain their walk on the sidewalk without passing through the street than on Alexandria Sidewalks. Moreover, a general factor behind this pattern of movement in both streets can be that in the mindset of pedestrians, streets are continuous but the walk on sidewalks is always interrupted by informal practices. Therefore, pedestrians tend to walk through the streets to avoid frequent obstruction.



**Figure 59 - Abstract illustration on map, showing the difference in pedestrian movement on both sidewalks: Haroun al-Rashid and Alexandria sidewalks Source: Author**



### *6.1.1.3 Tangible and Intangible Boundaries*

#### **Extension of shops on the sidewalk**

A significant observation during the field survey is the dominance of extension of shops, workshops, and *Qahawy* on the sidewalk space. It was clear that approximately 39 % of Haroun Al-Rashid sidewalk area (maximum area) is occupied with displayed products, 10% for *Qahwa* setting, and 4% for workshops (see fig. 60). This phenomenon rarely exists in Alexandria Street, where approximately 11% of the sidewalk area is occupied with displayed products of shops (see fig. 61).

On Haroun Al-Rashid sidewalks, it was evident that the extension of the shops outside their premises, whether occupying one or two zones on the sidewalk space, might not only be an economic-driven act but also a functional one. The reason in some cases can be due to the small area of the shops, where there is no enough space for clients to maneuver inside the shop, so owners extend to zone 1 as a private extension for the shop (see fig. 62), or, sometimes they also display products in zone 3. Also, the wideness of the sidewalk facilitates the process of spilling over on the sidewalk space. Therefore, the small area of the shops and the adequate sidewalk space are two main factors triggering the extension of shops. Due to the frequency of the existence of this practice, users perceive it as a normal act, and part of the daily routine. For example, some workshops in the area use the sidewalk as a waiting area for the clients, a display for the furniture, and a repairing zone, while the indoor space is only used for storing the equipment and repairing tools (see fig. 63).

One clear motive behind this act is the permeability of storefronts. Owners tend to visually connect activities in and out of the buildings for the passersby. When shops are directly open to the sidewalk space, it allows the people outside to hear the activities inside and, in some cases, to smell the goods for sale. This permeability and information of the inside of stores attracts the curiosity of many. In neighborhood commercial streets, the ground floor level is usually designed with permeable street fronts such that the spaces and activities inside the building can be sensed in the street space fronting the building (Mehta, 2013). In the case of Haroun Al-Rashid street, displaying products on the sidewalk replace window display for shops, since most of the shops open the roller shutters and move their products on the sidewalk on daily basis (see fig. 62).

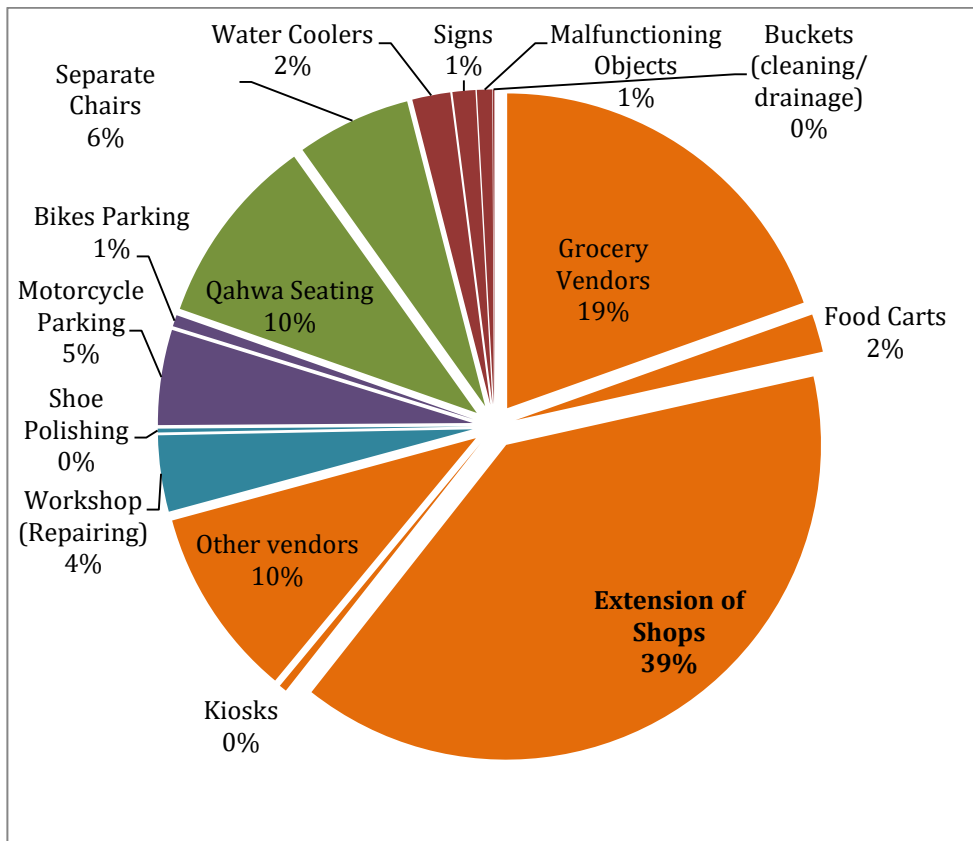


Figure 60 percentages of areas consumed by each typology on Haroun Al-Rashid sidewalks. Source: Author

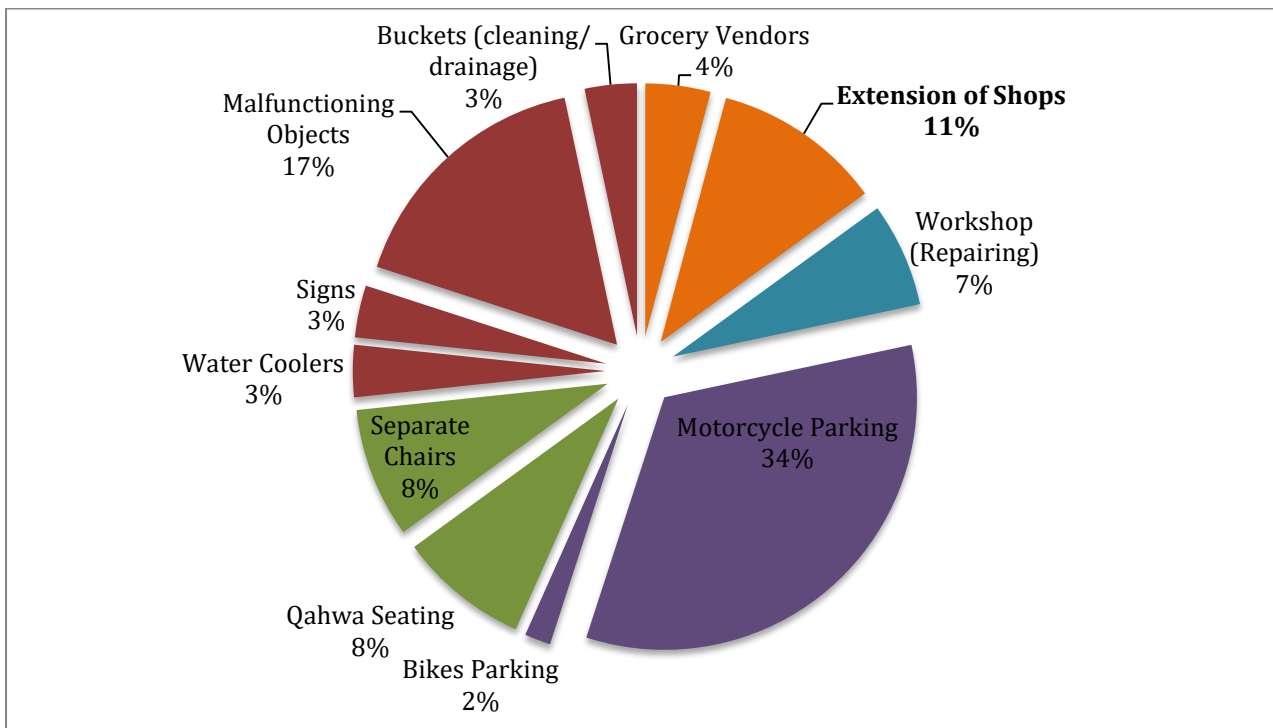


Figure 61 percentages of areas consumed by each typology on Alexandria Sidewalks. Source: author



Figure 62 Extension of shops in zone 1, Haroun Al-Rashid sidewalks. Source: Author



Figure 63 Extension of workshop on sidewalks of Haroun Al-Rashid St. Source: Author



The previously defined distinct zoning of the sidewalk space can sometimes create tangible and intangible boundaries, depending on the type of practice and its location on the sidewalk. During the field survey, it was clear for the researcher that the zoning of furniture/objects on the sidewalk is not always rationally done. This furniture/objects are most of the time placed in its specific location for a reason that might not always be very obvious for pedestrians. Some are placed to [in] directly mark the boundaries of the various territories on the sidewalk, while others can act as clear territorial gestures to emphasize the presence of certain practices on the sidewalk. Therefore, it was observed that most of the time there is always another hidden reason behind the spatial arrangement of informal practices besides its functionality.

### **Tangible Boundaries**

For example, in Alexandria Street, the bread metal/wooden racks are placed on the sidewalk opposite to the bakery. These racks are used by the clients to ventilate the bread before it is being collected in the plastic bags. In that way, the territory of the bakery extends to occupy the whole street. (See fig 64). Similarly, in Haroun Al-Rashid, three to four movable metal racks are placed on the sidewalk of a bakery, occupying the full adjacent area of the sidewalk (see fig 65).

Another example explaining this phenomenon is the zoning and spatial arrangement of chairs and tables of shop owners/salesmen. In both streets, the separate chairs and tables are most of the time located in zone 3 of the sidewalk, opposite to the shops of the users, and their products are displayed beside the exterior walls of the shops, in that way, the whole adjacent area of the sidewalk is occupied (See fig 66). In addition to that, large number of chairs on the sidewalk was not occupied during the field surveying. Users place their chairs on the sidewalk, usually directly beside the entrances of their shops or on the street-side of the sidewalk as a normal daily routine to defend their own territory, even if they are not in use. In some cases, like in Alexandria Street, a stack of plastic chairs is placed on the sidewalk.

Another significant example is the location of the water coolers at the far end of the sidewalk (Zone 3 in Haroun Al-Rashid sidewalks), in front of shops (see fig. 67). During the interviews, shop owners mentioned that they place a water cooler on the sidewalk to serve their clients. The approximate distance

between water coolers is only around 40 meters. Some are hanged around the trees, freestanding on metal legs, covered with metal cage, or put on small chairs, whereby, by the end of the day, some are stored inside the shop over the night (see fig.68). However, the majority is left on the sidewalk overnight. The shop owners/salesmen are responsible for refilling the water coolers during the day.

This reveals interesting information about the way users directly mark their territories and defend their use of the shared public space. These users might be doing these acts in order to less subject themselves to rejection and negotiations with the residents or the municipality. There are more water coolers in Haroun Al-Rashid Street (50) than in Alexandria Street (15), since there are more shops, the sidewalk is livelier, and the users are more aware of the consequences of the negotiations and conflicts regarding the sidewalk use. Therefore, in this way, the boundaries of the shop indirectly extend to occupy the whole sidewalk adjacent area.

**It can be clear from the following sections that users personalize the sidewalk space in their own way to defend their territories by creating tangible boundaries to frame their territories. These users keep on extending their territories; on or off the sidewalk premises, until they face equal or higher resistance. Whether this resistance is traffic demanding its rights, dead wall, parked cars, or entrances of residential buildings.**

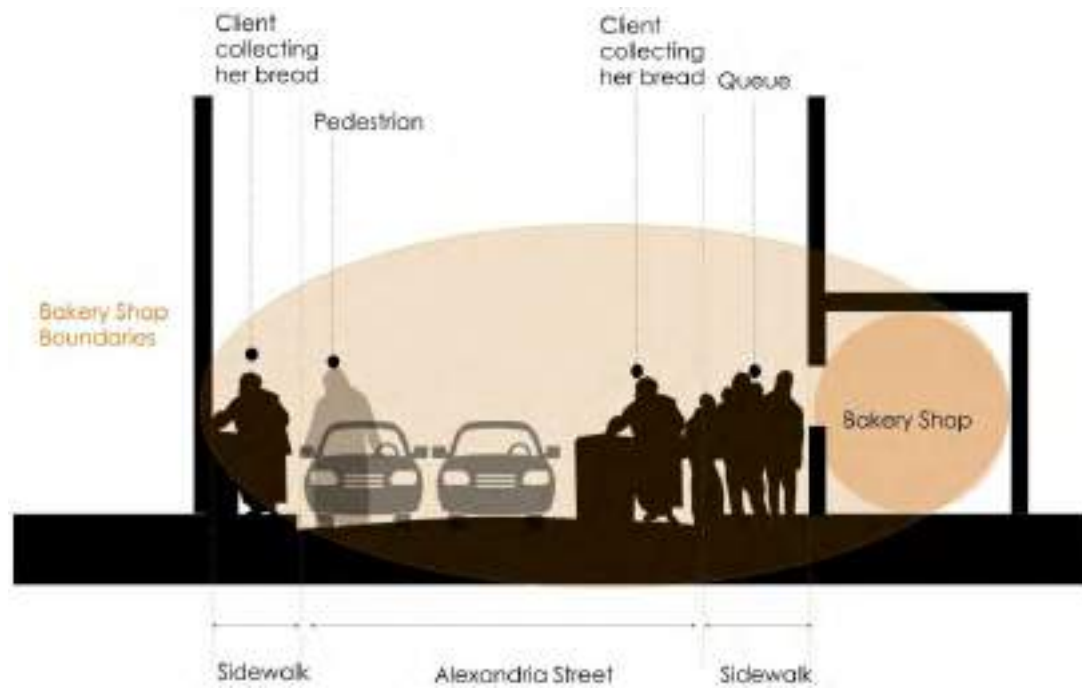


Figure 64 Cross-section showing the tangible boundaries of the bakery shop in Alexandria St.  
Source: Author

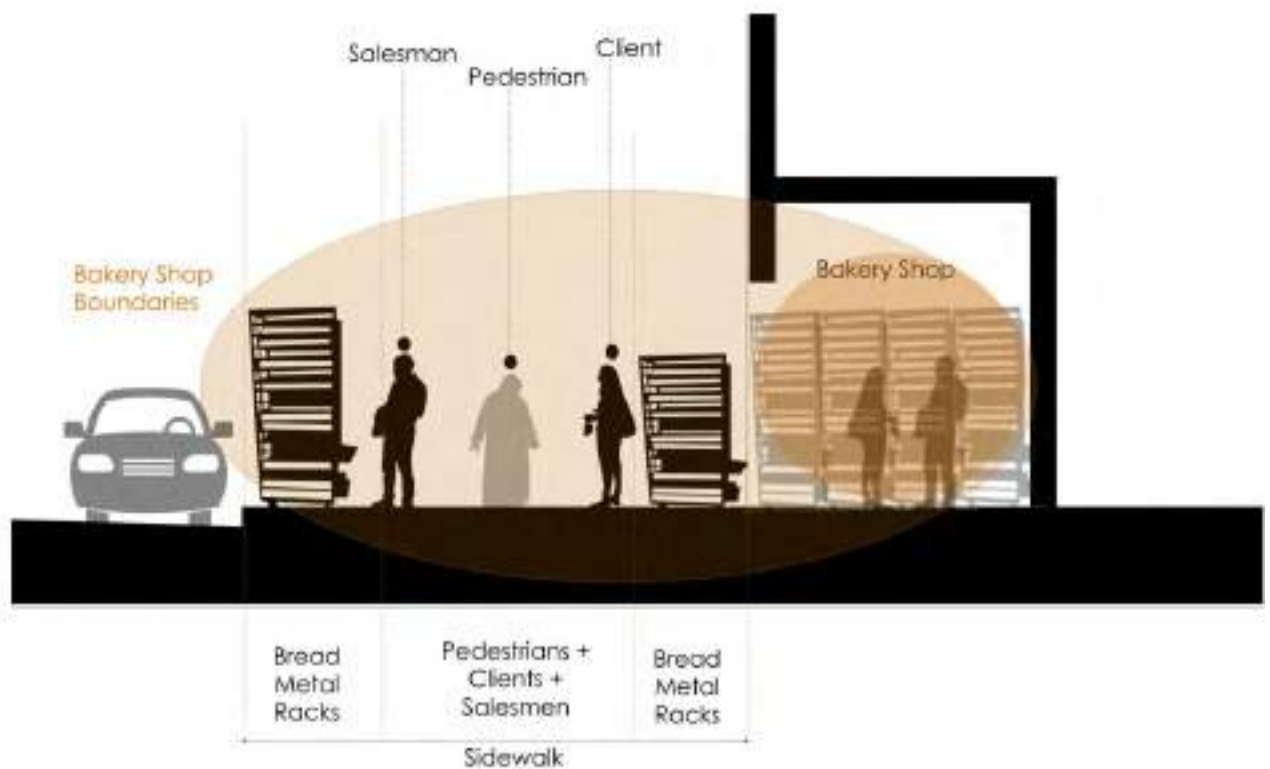


Figure 65 Tangible boundaries of bakery shop on the sidewalks of Haroun Al-Rashid St. Source:  
Author

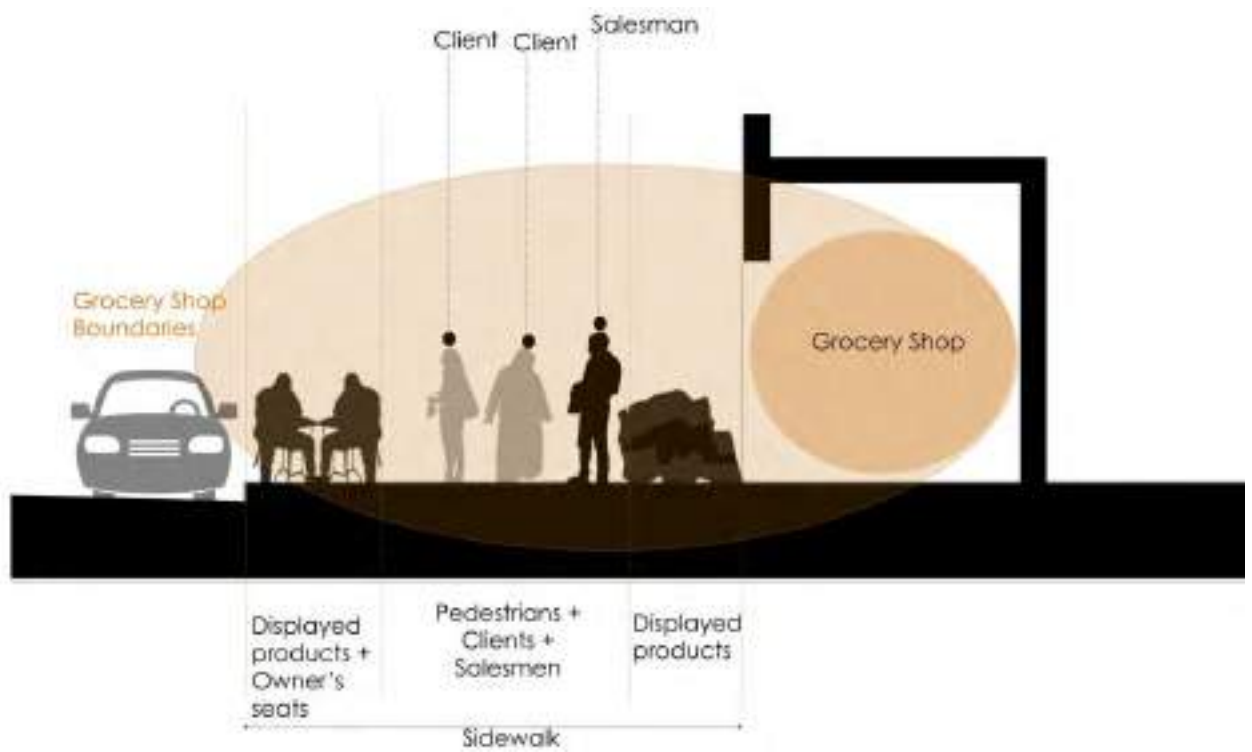


Figure 66 tangible boundaries of shops by placing the chairs of owners in zone 3 Source: Author

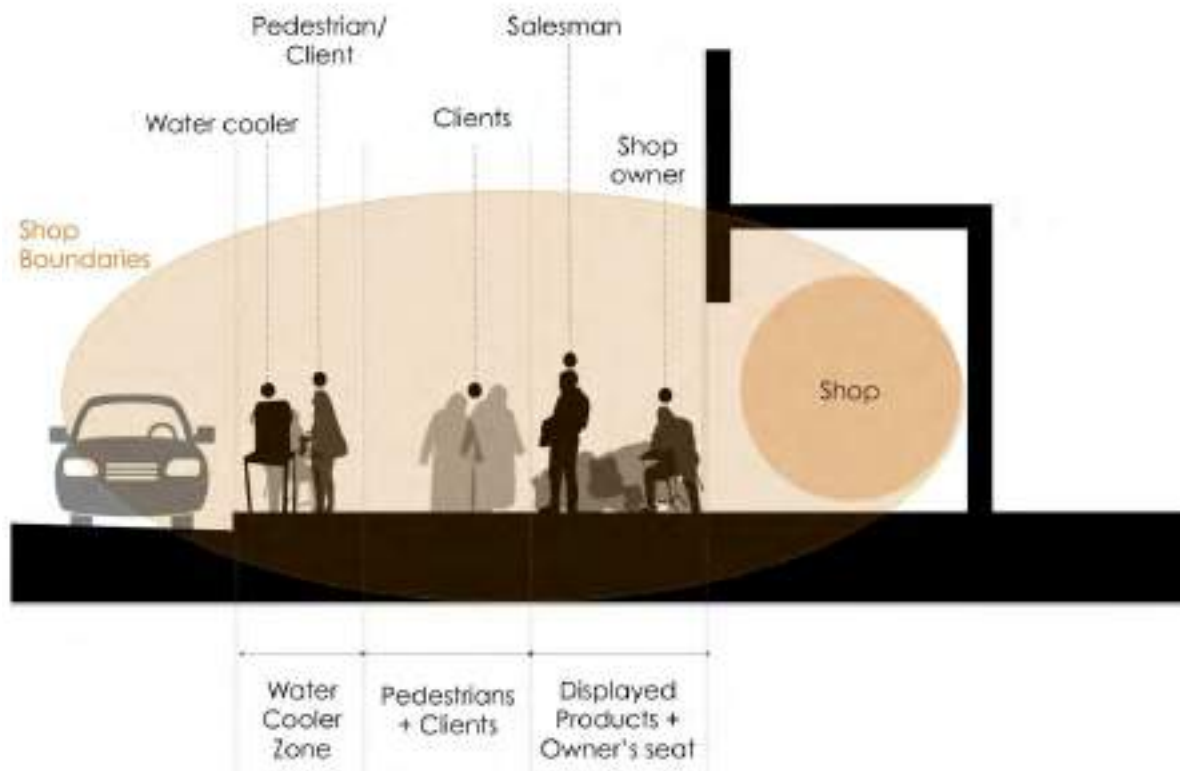


Figure 67 tangible boundaries of shops by placing their watercoolers in zone 3, Haroun Al-Rashid sidewalks. Source: Author



Figure 68 Types of watercoolers on the sidewalks of Haroun Al-Rashid sidewalks

## Intangible Boundaries

### Reserving a parking space

Apart from the seen and observed tangible boundaries created by the different informal practices, there are other intangible ones, creating invisible **boundaries for the users'** territories. For example, some shop owners park their private cars on daily basis in the parking space in front of their shops. They even sometimes display part of their products beside their cars (See fig.69). These users are aware that they might be subjected to rejection by displaying products in the adjacent parking space; therefore, they reserve a space on the street by parking their own cars to defend their territories.



Figure 69 Shop owners displaying mattresses on their parked cars in front of their shops. Source: Author

## The power of tiles

Another important point of study was the finishing materials used on the sidewalk floors in both streets. In Alexandria Street, there are around 25 different kinds of tiles used on the sidewalk, however, in Haroun Al-Rashid St., there are approximately 15 tiles used. In Alexandria Street, most of the shops use different tiles to extend on the whole adjacent area of the sidewalk, however, in Haroun Al-Rashid st., some of the shops only use different tiles to mark their entrance; like Jewelry shops, but not the whole adjacent area of the sidewalk (see fig. 70,71,72). In Alexandria Street, the spaces where the sidewalks are narrow are the ones where there are various types of tiles used, while the rest of sidewalk tiles are unified. The various kinds of tiles are arranged differently according to the function, either to define the shop entrance, or the building's entrance, or to cover parts of the sidewalk that were broken.

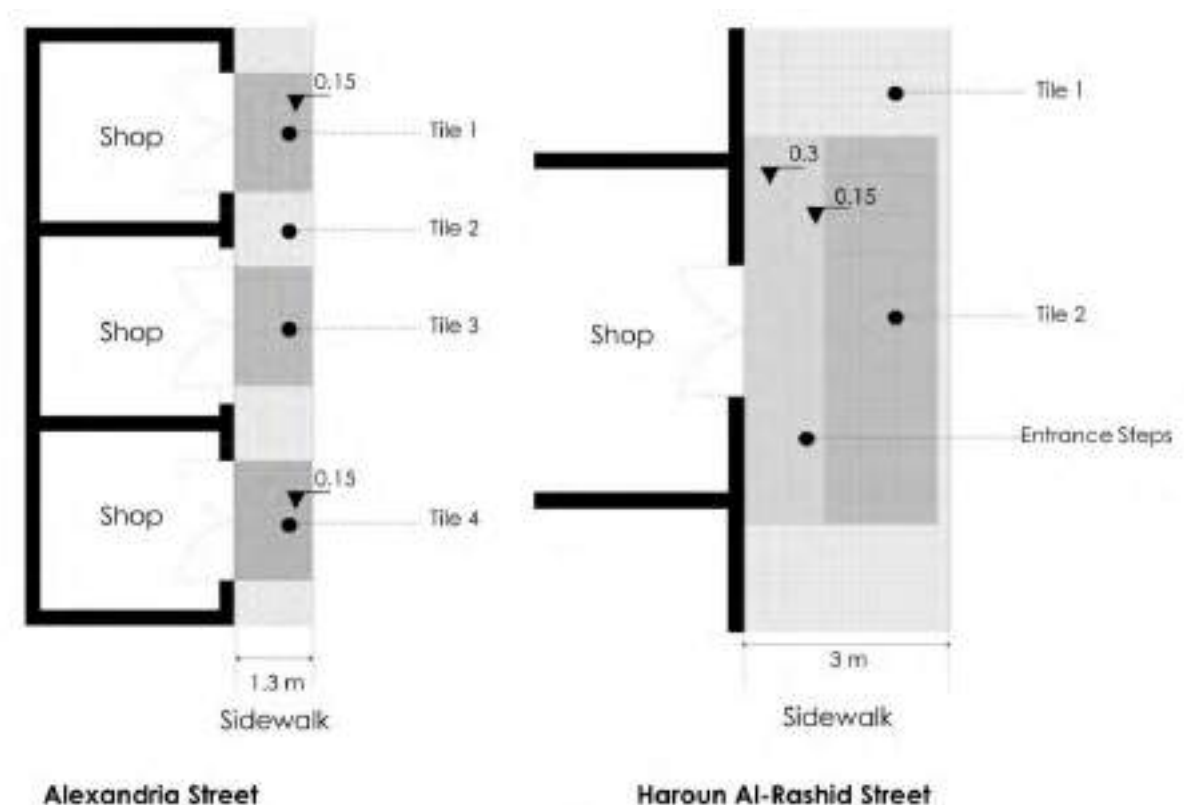


Figure 70 the arrangement of tiles on the sidewalks of Alexandria & Haroun Al-Rashid St. Source: Author





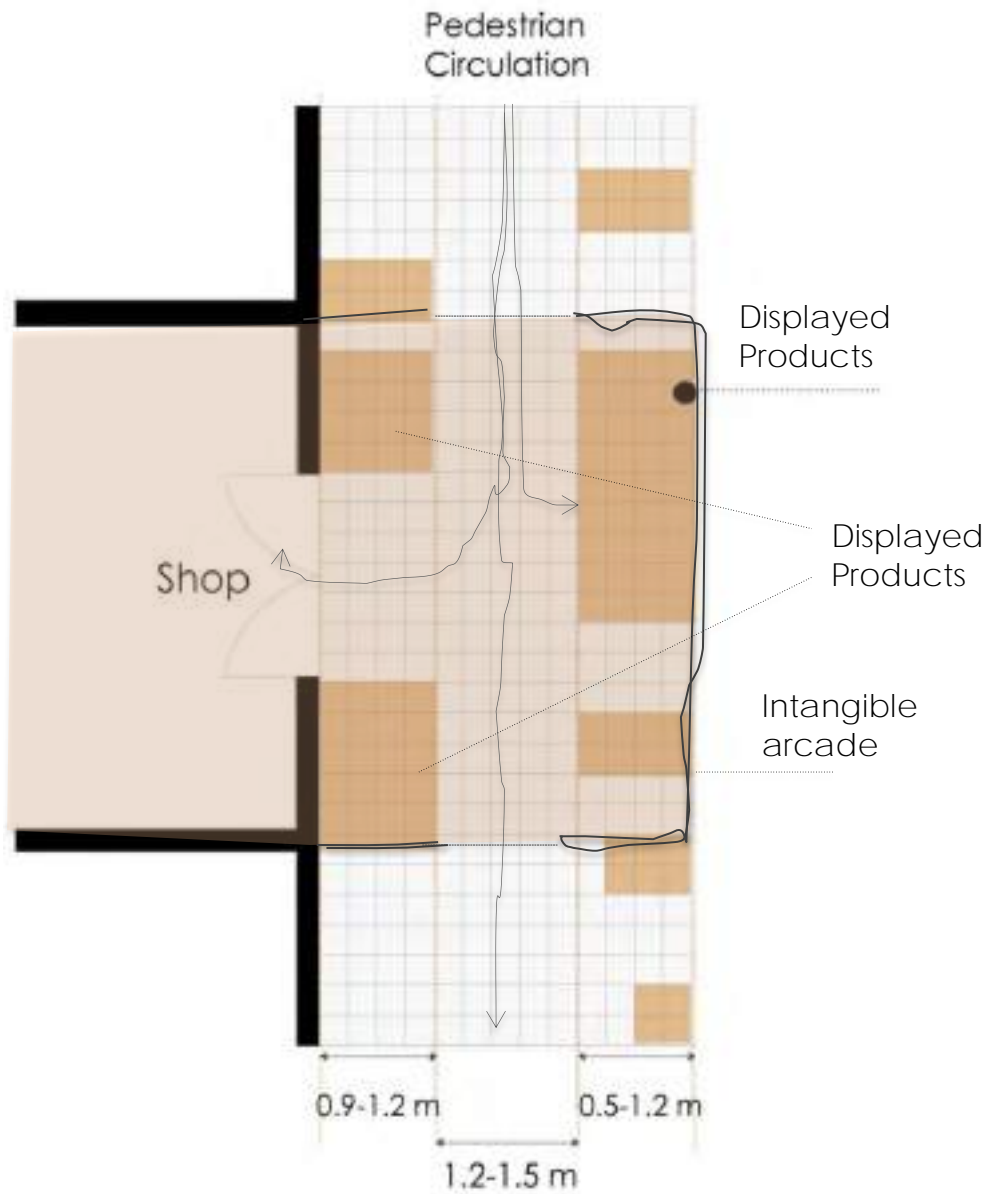
Figure 71 Homogeneous finishing of the sidewalks of Haroun Al-Rashid St. Source: Author



Figure 72 Different tiles used on the sidewalks of Alexandria St. Source: Author

However, during the field observations, it was clear that the floor tiles on Haroun Al-Rashid sidewalks, where the sidewalk space is more adequate and the finishing materials are more consistent, somehow guided the spatial arrangement of furniture used by the different users. It was interesting to find out that some users stick to the lines marked by the square tiles to mark the boundaries of their displayed products or movable furniture (see fig 73,74,75). As mentioned before, the general aim behind the arrangement of the sidewalk space to three distinct zones is to leave an adequate space in the middle zone for pedestrians/clients to walk. Users tend to respect keeping the walking space (zone 2) clear in order not to subject themselves to rejection and negotiations with pedestrians or municipality officers.

And most importantly, some shop owners tend to create an intangible arcade for the pedestrians, to somehow manipulate their movement and guide them towards entering their shops or checking their displayed products (see fig. 73). They do that by indirectly forcing the pedestrians to pass through the intangible boundary of their territory. The finishing tiles facilitated this process, and helped the users of informal practices in some cases to precisely mark their limits of extension on the sidewalk. Also, in an indirect way, it gives the pedestrian the sense of organization and direction on the sidewalk despite the intensity of informal practices taking place.



**Figure 73 Users marking their territories according to the dimensions of tiles on Haroun Al-Rashid sidewalks, Source: Author**



**Figure 74 Products displayed on the sidewalks respecting the boundaries marked by tiles. Source: Author**

**Figure 75 separate chairs territory marked by floor tiles on Haroun Al-Rashid sidewalk. Source: Author**

Moreover, in Haroun Street, few shops indirectly extend to the sidewalk by painting the floor tiles of the adjacent area instead of occupying the sidewalk with displayed products (see fig 75). **In that way, in the user's point of view, the sidewalk is kept well maintained and decorated, which in return makes the user less subjected to rejection from the municipality or the residents.**





**Figure 76 Shop painting the adjacent sidewalk space in Haroun Al-Rashid St. Source: Author**

Some products are hanged outside the shop, which is an indirect way of defending and marking their territory on the sidewalk without placing anything on the sidewalk itself.

#### *6.1.1.4 Impact on personalization of the sidewalk*

The physical design of the sidewalk **doesn't only** affect the pedestrian movement on the sidewalk, but it also has a great impact on the level of personalization of the sidewalk space by the different users. According to the interviews conducted with the different users of the sidewalks in the studied areas, it was clear that in Haroun Al-Rashid Street, most if not all of the stationary vendors are always located at the same exact place on the sidewalk everyday. Each vendor marks his/her territory by occupying a specific standard area, locating the boxes and furniture in the same way everyday, the setting is usually arranged in the same way on daily basis. Even the shop owners display their products in the same place, same way, and stay for the same duration on

the sidewalk everyday. This scenario has been taking place for a long time. The spatial arrangement of the adjacent sidewalk space by the informal practices users have always been organized and managed in the same way on the sidewalk. Because of that, a strong connection between the various users of informal practices has developed, based on mutual economic, functional, and social interests.

Because of the adequate sidewalk width, users of informal practices were given a better opportunity to personalize the space and organize their territories collectively in order to maintain the vibrant quality of the sidewalk, and at the same time prevent them from being subjected to frequent negotiations and rejections. Also, furniture used by the different users on the sidewalk space plays an important role in defining, marking, and defending their territories, such as: umbrellas, wicker boxes, wooden tables, small chairs, weighing machines, hanged products outside the shops, workshop tools and equipment, garbage bins, and water coolers (see fig 77).

However, in Alexandria Street, apart from the residential nature of the street and the existence of less informal practices, the narrowness of the sidewalk and the obstruction created by the traffic circulation, plays an important role in creating a weaker connection/relation between the informal practices taking place (see fig 78). Therefore, each user personalizes the adjacent sidewalk space independently, and the users rarely share their territories or the movable furniture.

For example, on Haroun Al-Rashid sidewalks, shops and *Qahawy* have more space to extend their territories in zone 1 and 3, street vendors have more space to display their settings in zone 3, users share the chairs and tables, and shoe-polishing workers manage to define a working space in front of the *Qahwa* (see fig 77). During the interviews, it was mentioned that many of the users depend on each other for functional, economic, and social reasons. For example, owners of the nearby shops share the separate chairs, some shop owners depend on the kiosk owner to pay the garbage collector at midnight to empty their garbage bins, grocery vendors borrow chairs from shop owners or *Qahawy*, and so on. Therefore, the direct relation between the different users is stronger.

However, in Alexandria Street, some shop owners mentioned that they rarely share their chairs with other colleagues, or borrow it from the Qahwa nearby. And since the informal practices rarely exist next/opposite to each other on Alexandria sidewalks, they rarely depend on each other for their existence, and thus, each user personalize his adjacent sidewalk space independently. The relation/connection between the various informal practices becomes weaker and indirect.

In Haroun Al-Rashid sidewalks, users personalize the sidewalk space **collectively as a group who share the same interests. However, in Alexandria's** sidewalks, each user personalize the adjacent sidewalk space individually, in a certain way, in other words, there is no common interest or self-organized regulations obeyed by the group of users.



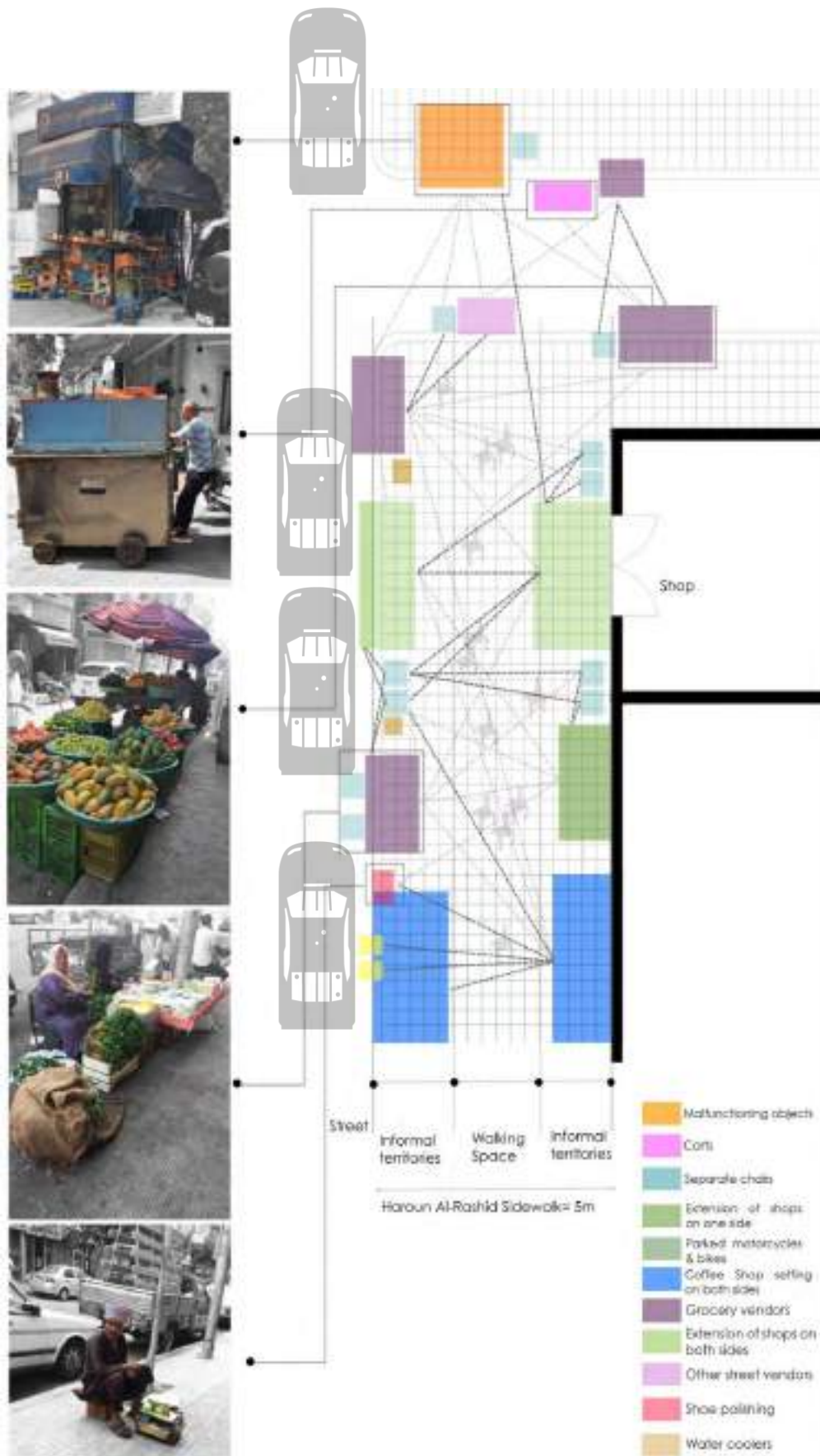


Figure 77 A typical spatial arrangement of informal practices on Haroun Al-Rashid sidewalks. Diagram shows the high level of personalization by users of informal practices. Source: Author

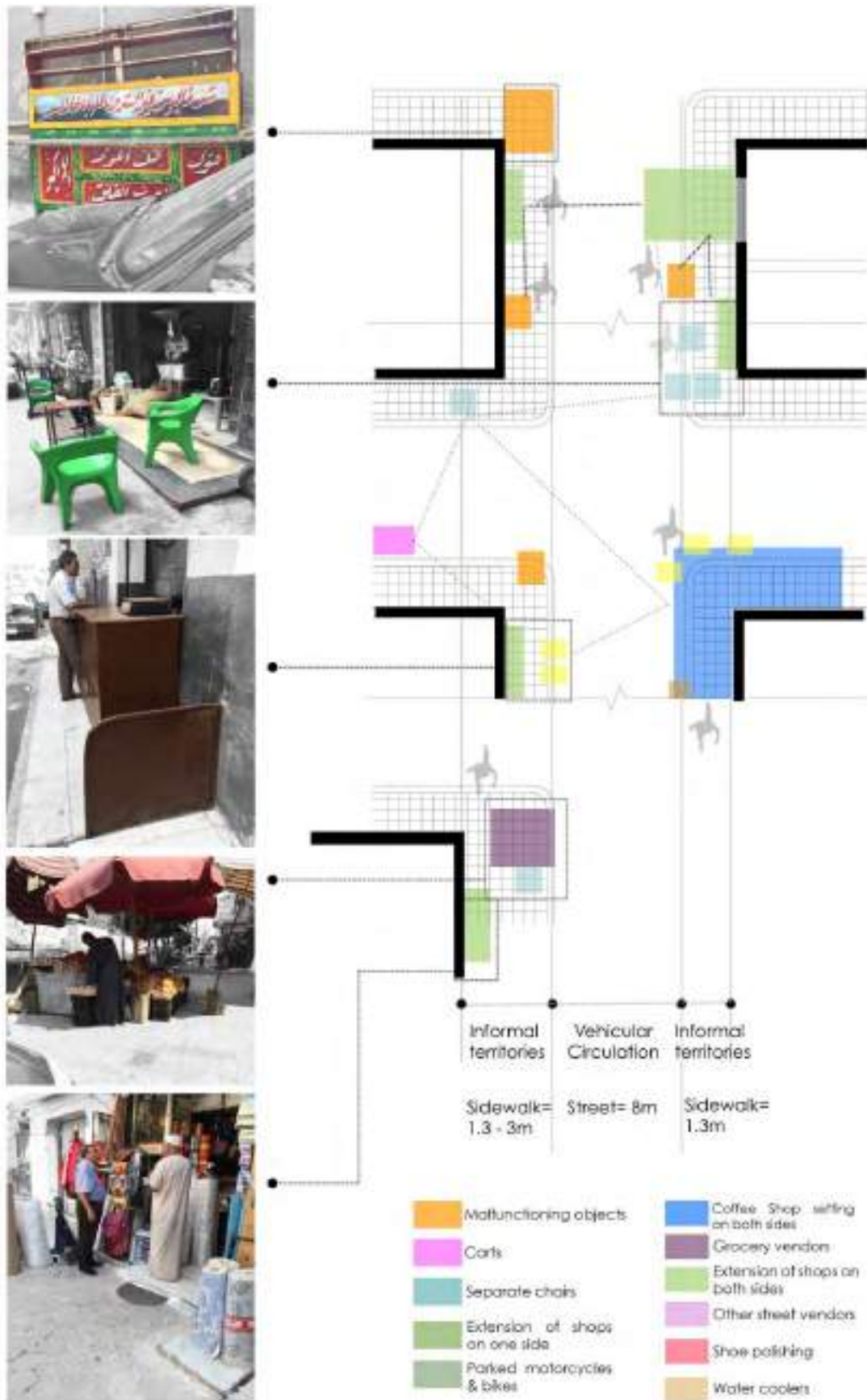


Figure 78 A typical spatial arrangement of informal practices on Alexandria sidewalks. Diagram shows weak connection between users of informal practices. Source: Author

## 6.1.2 Understanding the Space-time factor

### 6.1.2.1 Duration and frequency of informal practices

From the interviews conducted with the different users of informal practices on both sidewalks, it was clear that the majority of them have been using the same space of the sidewalk, even if it was used differently in the past, for more than 40 years (see fig 79). Users are very familiar with the surrounding neighborhood, and familiar with the other users of the space. Not only, but also the majority perform these practices on daily basis (see fig 80). This phenomenon was clearly reflected in the way these users use the sidewalks and organize their territories in both streets.

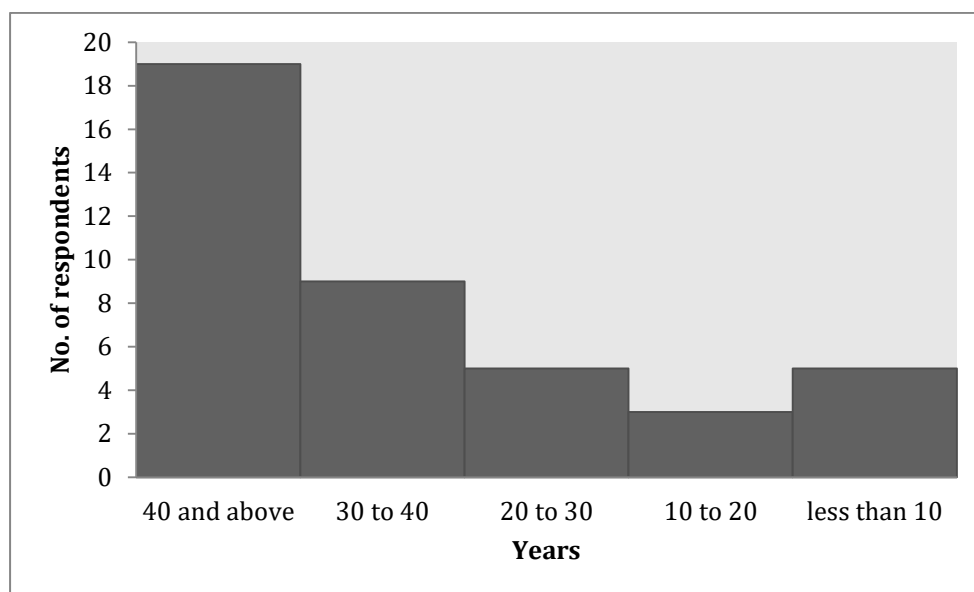


Figure 79 Result of the interview conducted with users of informal practices. Question: "How long have you been staying here?"

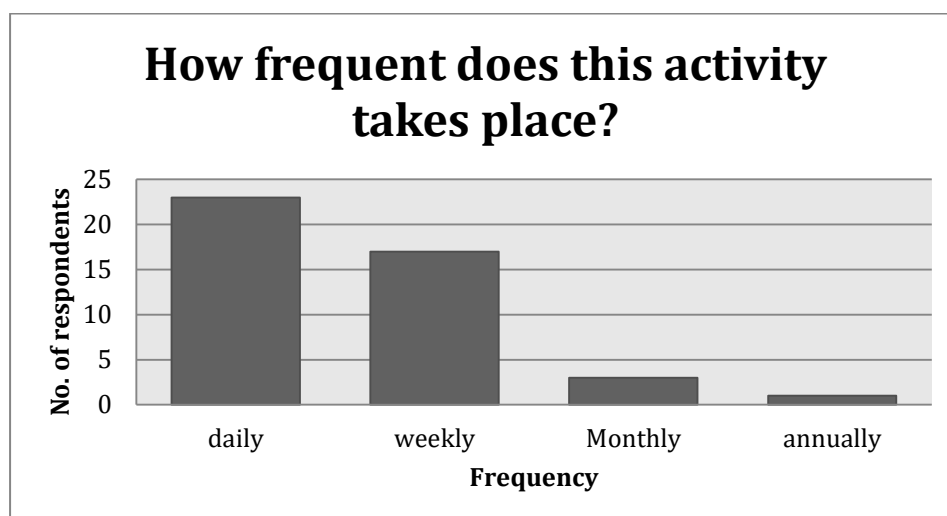


Figure 80 results of the interview with users of informal practices. Question: "How frequent does this activity take place?"

#### *6.1.2.2 Space-time Map*

The time factor plays an important role in understanding the dynamics of the sidewalk life of the two case studies. The data collected at three different times of the day was useful for creating a better understanding of how the users of informal practices use and share their territories throughout the day. Therefore, the researcher attempted to translate the collected data of the different uses of space into an interactive map (See fig 83). The purpose is to have the X-axis presenting the studied sidewalk spaces, and the Y-axis presenting time. Each practice was given a color code. The area of the colored bar increases with the increase of the area of each practice. Some informal practices stay in the same location throughout the day (see fig 81), others extend and occupy more space later during the day, and some spaces are shared. In general, in the time interval (12 pm to 8 pm), the sidewalk is more accumulated with different layers of territorial practices. Most of these practices start to take place between 9 am to 11 am, which is the time when shops open. For example, all the cafes have their chairs and tables located around the exterior walls of the café (Zone 1) during the day. Later during the day, the setting can extend to the third zone of the sidewalk, either leaving the second zone of the sidewalk unoccupied for pedestrians or occupying it as well.

The space-time map of Haroun Al-Rashid reflects the vibrant and dynamic use of the sidewalks, where different informal practices take place simultaneously and are rearranged throughout the day. However, in Alexandria Street, informal practices are more scattered, less intense, and more static. The more dynamic practices like the chairs and tables, the extension of shops exists more in the zone closer to the mosque, while the other half of the street is clearer, where it is purely residential (see fig. 84). The map of Alexandria Street shows that the majority of informal practices are static and less subjected to changes throughout the day.

#### **Impact of climate**

One important factor behind the organization of practices throughout the day is the time of field study. The study was undertaken during the summer (mid-August to the end of September), where the temperature ranged from 26-30 degree Celsius. It is clear in the diagram below that the sidewalk space in both streets is more contested in the middle of the day than in the morning. Because of the good weather, life on the sidewalk was more vibrant and

accumulated with different territorial layers. For example, it can also be shown in figure 83 that most of the practices tend to extend to zone 3 after 5:00 pm, where the weather is more convenient and less sunny. Moreover, most of the shop owners and salesmen move their chairs and tables to the sidewalk rather than staying inside the shop, where the weather is more convenient for staying.

In Alexandria Street, the types of informal practices on the sidewalks are rarely dependent on the good climate for their existence. For example, as shown in figure 84, some shops like the supermarkets, falafel shops, butcher, or workshops have their machines/fridges/furniture located permanently on the sidewalk; they are not moved inside the shops overnight. Also, the malfunctioning objects are permanently placed on the sidewalks of Alexandria Street throughout the year. These kinds of practices **don't adapt to the change** in weather during the year.

### **Impact of Tree-Shade**

The location and quantity of trees on the sidewalks of Haroun Al-Rashid attracts certain informal practices to take place, such as: separate chairs and tables, street vending, bike parking, and water coolers. However, the trees by themselves are not strong magnets if not accompanied by active commercial activities. So, the overall setting triggers the extension of informal practices on the third zone of the sidewalk during the day.

The accumulation of informal practices (for example: street vendors, or separate chairs and tables) usually happens in the most shaded areas, under the existing trees. As an evidence to this, 11% of the interviewed users mentioned that they define their territories through their location under the tree shade (See fig. 82).

Moreover, trees have multi-functional uses on the sidewalks: for hanging water coolers, displaying products, parking motorcycles and bikes, hanging light shading structures above the sidewalk, or hanging Advertising papers. Some trees are decorated, painted, or lighted by users of the adjacent shops as a way of personalizing the sidewalk space. Floor brushes and cleaning buckets are sometimes placed beside the trees on the sidewalk during the day. Shop owners/salesmen use them to clean the adjacent area of the sidewalk, and then

they either place them inside the shop or leave them beside the trees or light poles.

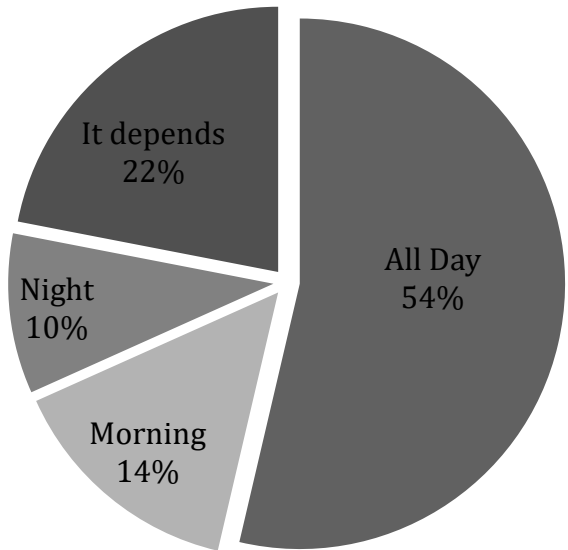


Figure 81 duration of stay of informal practices in both streets. Results from interviews with users of informal practices

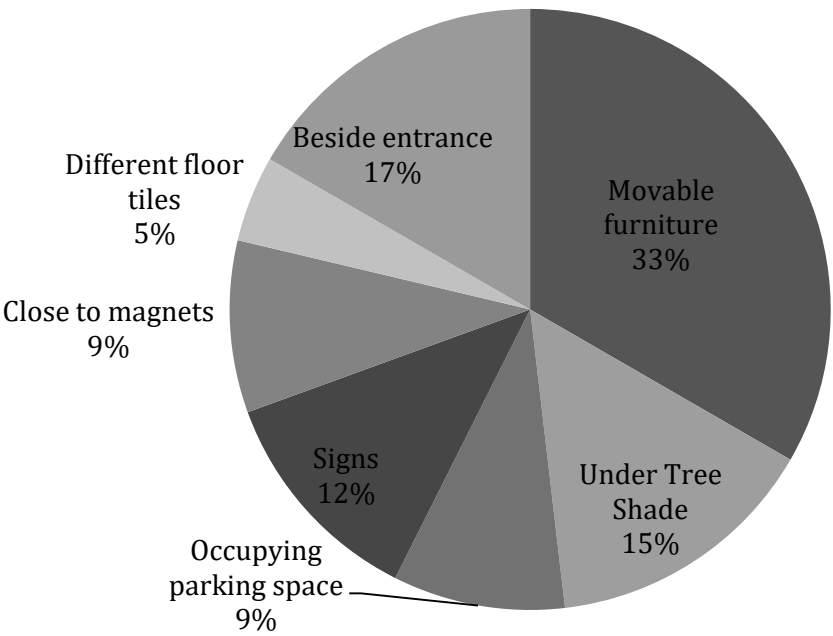


Figure 82 results from the interviews conducted with users of informal practices. Question: "how do you define your territory?"



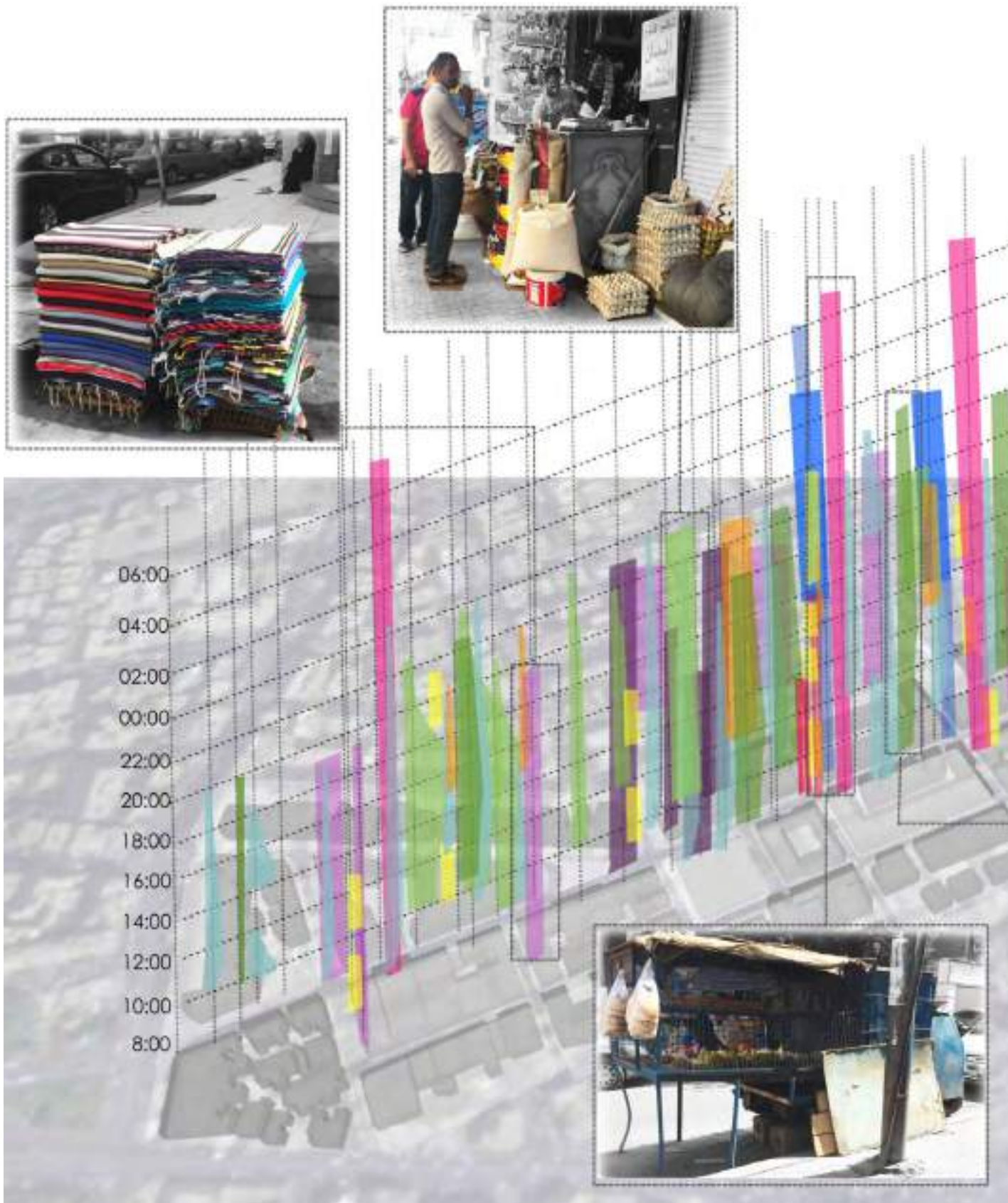
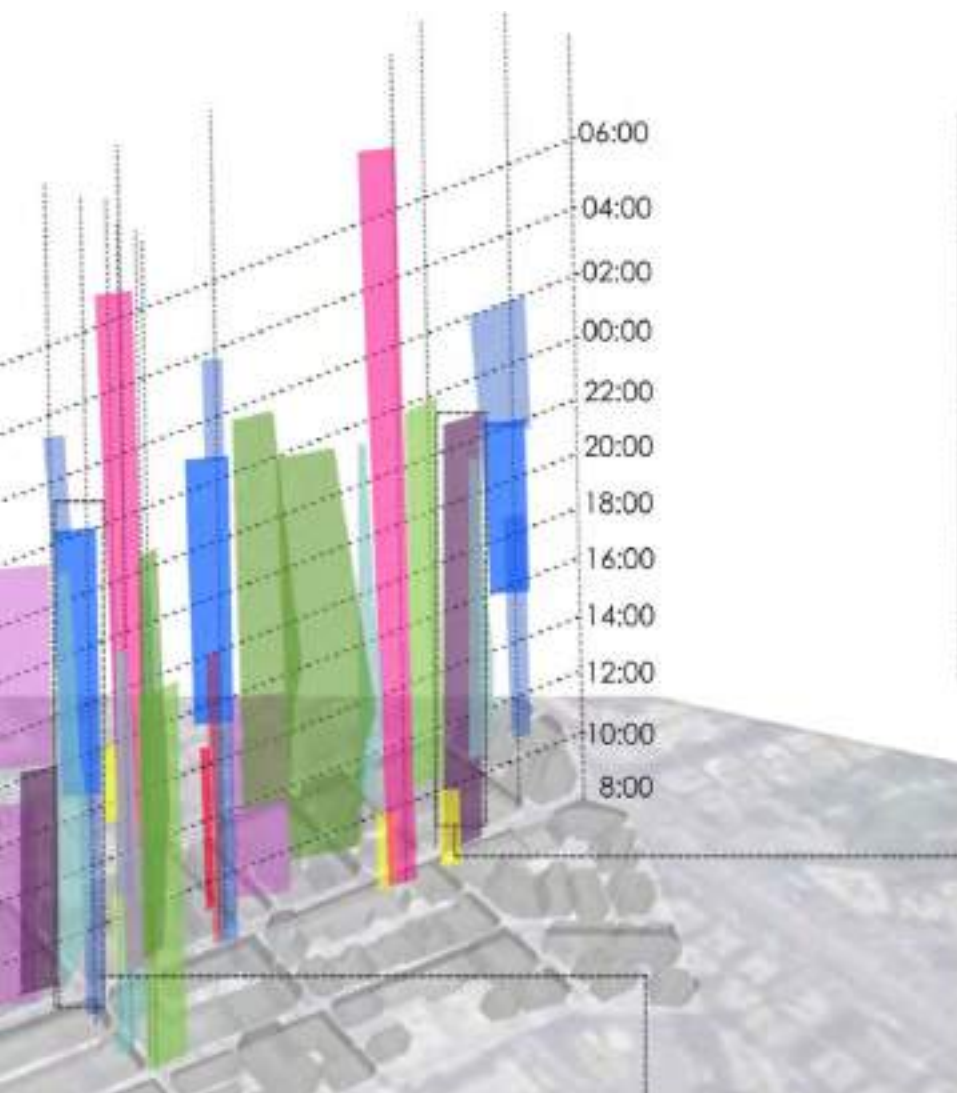


Figure 83 Space-time diagram of informal practices on Haroun Al-Rashid sidewalks. X-axis presents the sidewalk space & Y-Axis presenting time. Source: Author



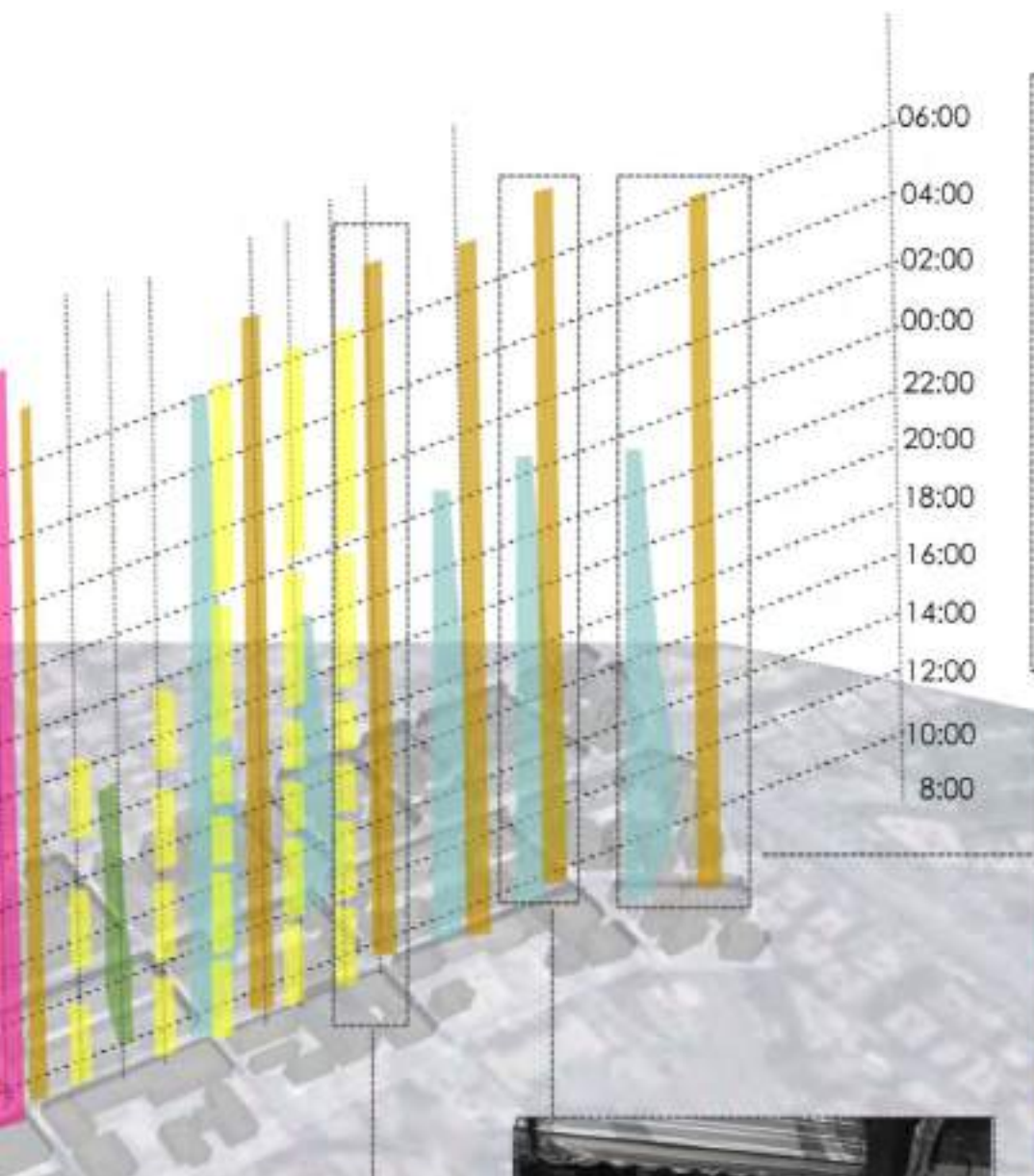


- Fixed furniture
- Separate chairs (2 or less users)
- Extension of shops on one side
- Malfunctioning objects
- Parked motorcycles & bikes
- Coffee Shop setting on one side
- Coffee Shop setting on both sides
- Grocery vendors
- Extension of shops on both sides
- Other street vendors
- Separate chairs (more than 2 users)
- Shoe polishing



Figure 84 Space-time diagram of informal practices on Alexandria sidewalks. X-axis presents the sidewalk space & Y-Axis presenting time. Source: Author





06:00  
04:00  
02:00  
00:00  
22:00  
20:00  
18:00  
16:00  
14:00  
12:00  
10:00  
8:00



- Fixed furniture
- Separate chairs (2 or less users)
- Extension of shops on one side
- Malfunctioning objects
- Parked motorcycles & bikes
- Coffee Shop setting on one side
- Coffee Shop setting on both sides
- Grocery vendors
- Extension of shops on both sides
- Other street vendors
- Separate chairs (more than 2 users)
- Shoe polishing

### 6.1.2.3 Temporality and permanency of informal practices

As shown in the space-time maps of both streets, the dominant and permanent informal practices throughout the day on Alexandria sidewalks are the parked motorcycles and malfunctioning objects (See fig.87). These two kinds of practices consume the largest areas of the sidewalk space (See fig 85). However, the other dynamic informal practices take place temporarily on the sidewalk. For example, all the street (grocery) vendors, except one grocery vendors, occur temporarily on or off the sidewalk.

On the other hand, on Haroun Al-Rashid sidewalks, most of the static and dynamic practices permanently occupy the same place on the sidewalk everyday. The largest area consumed on the sidewalk space is for the displayed products and the street vendors, who permanently occupy the sidewalk in the same way everyday, unlike Alexandria sidewalks (see fig. 86).

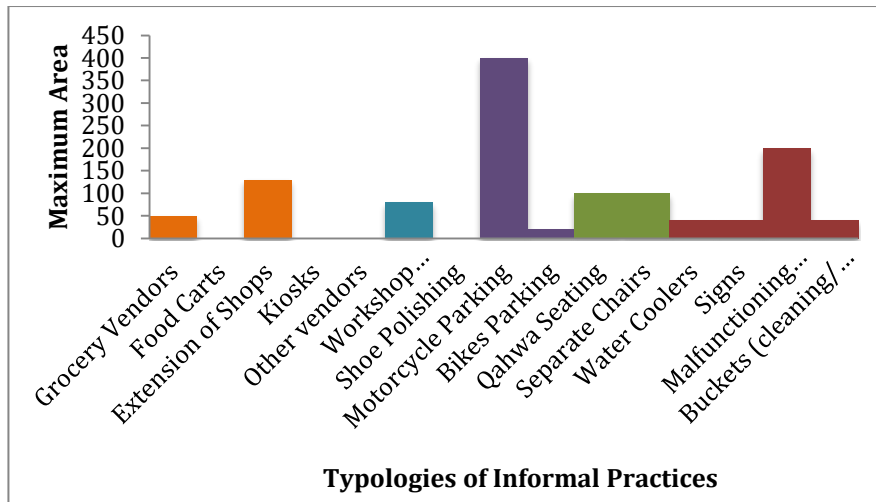


Figure 85 Maximum area consumed by each typology in Alexandria Sidewalks Source: Author

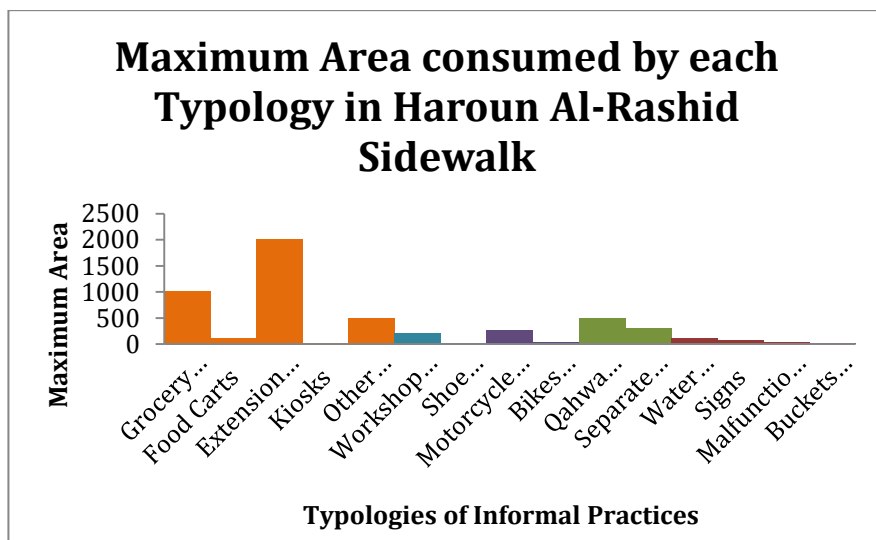


Figure 86 Maximum area consumed by each typology in Haroun Al-Rashid sidewalks. Source: Author



**Figure 87** Parked motorcycles on & off the sidewalks of Alexandria St. Source: Author

The malfunctioning objects on Alexandria sidewalks are usually in the form of: broken carts, defected vispas, steel structures, wooden boards, defected telephone booths, defected machines, or torn tires (see fig 88). These objects are permanently located on the sidewalks. Sometimes they are reused by vendors for displaying their products, used by clients to place the bread for ventilation in front of the bakery, seating areas for salesmen and pedestrians, **or just left unused obstructing the pedestrians' movement. They belong either** to residents or shop owners. However, in Haroun Al-Rashid Street, these objects rarely exist on the sidewalk. This phenomenon not only reflects the low maintenance of the sidewalks and the street as a whole, but also the indirect way of occupying a space on the sidewalk/street when not in use.

Time played an important role in understanding the dynamics of informal practices on both sidewalks. From the interviews with the different counterparts, it was clear that the space-time diagram is rarely subjected to changes over the year, except during public events and important occasions. In the case of Haroun Al-Rashid sidewalks, the market has been functioning in the same way for years, and the users are very well aware of the dynamics and order of the space.



Temporality and permanency of informal practices on both sidewalks is related to the contestation over the space. In Haroun Al-Rashid st., there seems to be no more competition over the use of the sidewalk space, since each user has already established his right to territorialize a certain space on the sidewalk. Therefore, the majority of the practices take place daily in the same place on the sidewalk. The various users conquered the space and defined it as their territories even when it is not in use. However, temporality in Alex is higher, because users are still competing over the use of the sidewalk space.



**Figure 88 Examples of malfunctioning objects on the sidewalks of Alexandria St. Source: Author**

### 6.1.3 Understanding the impact of Active and Passive Facades

*“What we want from the ground floor of urban buildings is vastly different from what we want from the other storeys. The ground floor is where building and town meet, where we urbanites have our close encounters with buildings, where we can touch and be **touched by them**. “ (Gehl, 2006)*

#### *6.1.3.1 Impact on intensity of informal practices*

The approximate percentage of area consumed by informal practices on Haroun Al-Rashid sidewalks was found to be 52%, while on Alexandria Streets it was 26% (see fig. 89,90). One important factor behind this phenomenon is the type of ground floor façades in both streets. **In this point of analysis, shop façades and activities on the sidewalks, were addressed based on the assumption that there would be more informal practices taking place in front of ground-floor façades with an open and varied character compared to those that were closed and monotone.**



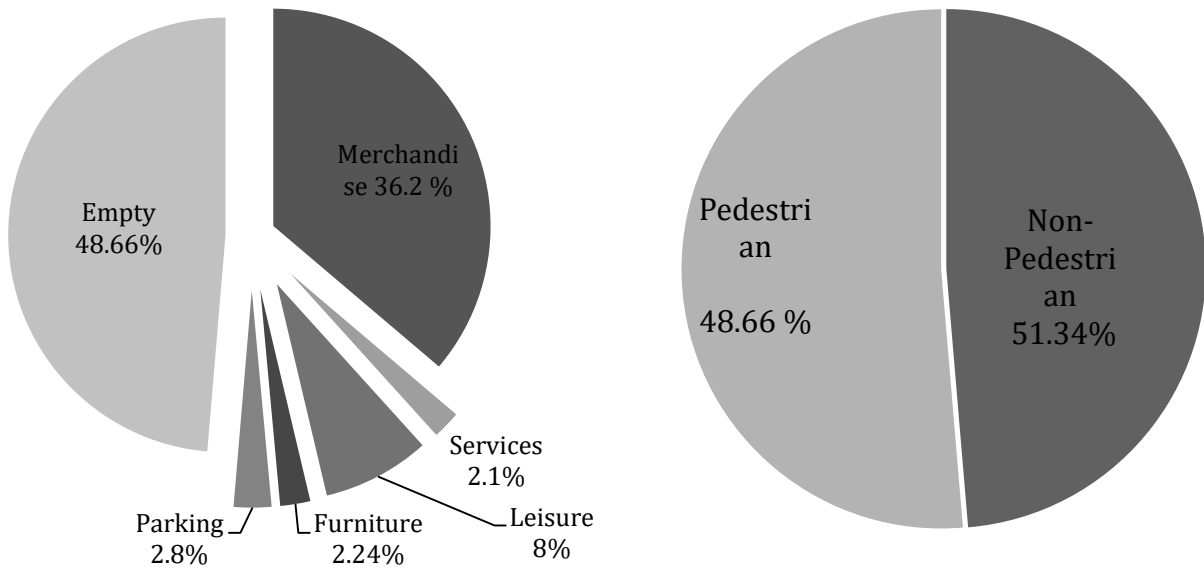


Figure 89 - Left: percentage of area consumed by each category on the sidewalks of Haroun Al-Rashid St..  
Right: pedestrian vs. non-pedestrian consumed areas on Haroun Al-Rashid Sidewalks

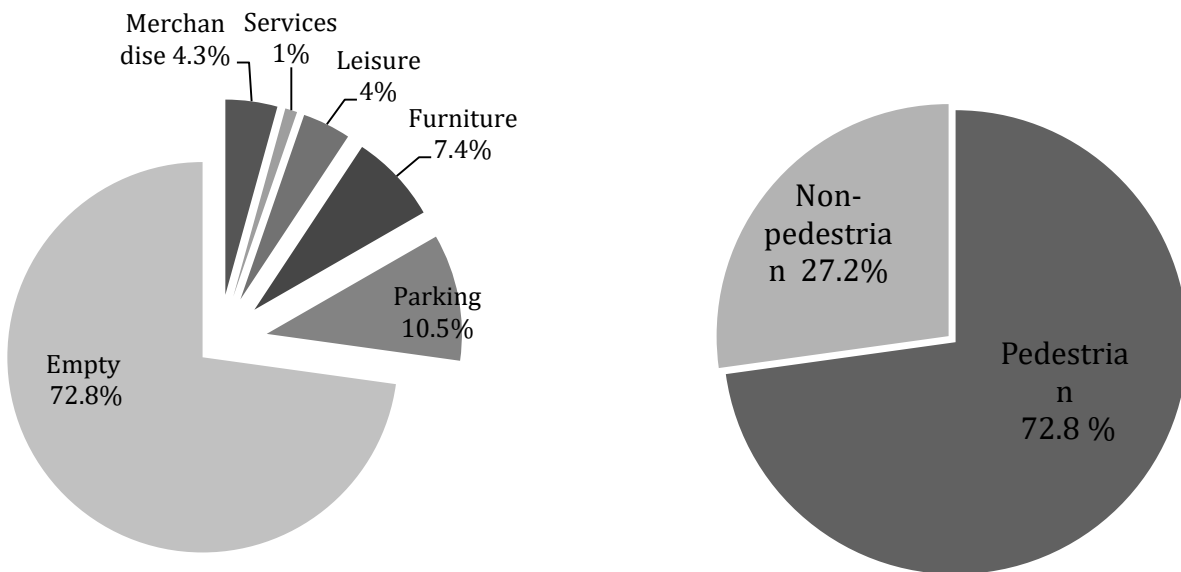


Figure 90- Left: percentage of area consumed by each category on the sidewalks of Alexandria St..  
Right: pedestrian vs. non-pedestrian consumed areas on Alexandria Sidewalks

According to Jan Gehl, in *Cities for People*, façade categories are as follows (2010):

*A-Active: Small units, many doors(15-20 doors per 100 m/328 feet)- Large variation in function- No blind and few passive units- Lots of character in façade relief- Primarily vertical façade articulation- Good details and materials*



**Figure 91 Active facades (Gehl, 2010)**

*B-Friendly: Relatively small units (10-14 doors per 100 m/328 feet) Some variation in function. Few blind and passive units Façade relief. Many details.*



**Figure 92 friendly facades (Gehl, 2010)**

*C-Mixture: Large and small units(6-10 doors per 100 m/328 feet). Some blind and passive units Modest façade relief. Few details.*



**Figure 93 Mixture of facades (Gehl, 2010)**

*D-Boring: Large units, few doors(2-5 doors per 100 m/328 feet)Almost no variation, uninteresting units Few or no details*



**Figure 94 boring facades (Gehl, 2010)**

*E-Inactive: Large units, few or no doors (0-2 doors per 100 m/328 feet). No visible variation in function. Blind or passive units. Uniform façades, no details, nothing to look at.*



**Figure 95 inactive facades (Gehl,2010)**

According to this categorization, the 900-meter segment chosen for study along the sidewalks of Haroun Al-Rashid St. were shown to be mostly accompanied with *active* ground floor facades, including relatively small shops for grocery,

housewares, bakeries, electric appliances, workshops, oriental coffee shops, supermarkets, and many others.

However, the 800-meter segment studied along the sidewalks of Alexandria includes a mixture of *active* and *passive* facades. However, the *passive/inactive* facades are much more than the *active* ones. The *active* facades in Alexandria Street are few, accompanied with the *Qahwa*, or few shops like the butcher's shop, bakery, supermarket, or the hospital. The majority are *passive* ones; in the form of fences surrounding the residential buildings, or shops that are closed and displayed for rent.

The buildings' ground floors in Haroun Al-Rashid Street contained a stretch of open, active façades with many details, opened roller shutters, and contact between inside and outside (see fig 96, 97). Fifty meters away, Alexandria Street contained closed, *inactive* and *boring* façade sections with closed shops, concrete fences for residential buildings, entrances to residential buildings, or none at all (see fig 95,97). Based on this interpretation, in both streets, informal practices rarely occur in front of jewelry shops, and it usually takes place in the form of separate chairs and tables, in other words, there is no accumulation of informal practices.



Figure 96 On the left: Boring facades in Alexandria St. Source: Author. On the right: Active facades in Haroun Al-Rashid St. Source: Author



Figure 97 On the left: Inactive facades in Alexandria St. On the right: Active facades in Haroun Al-Rashid St. Source: Author

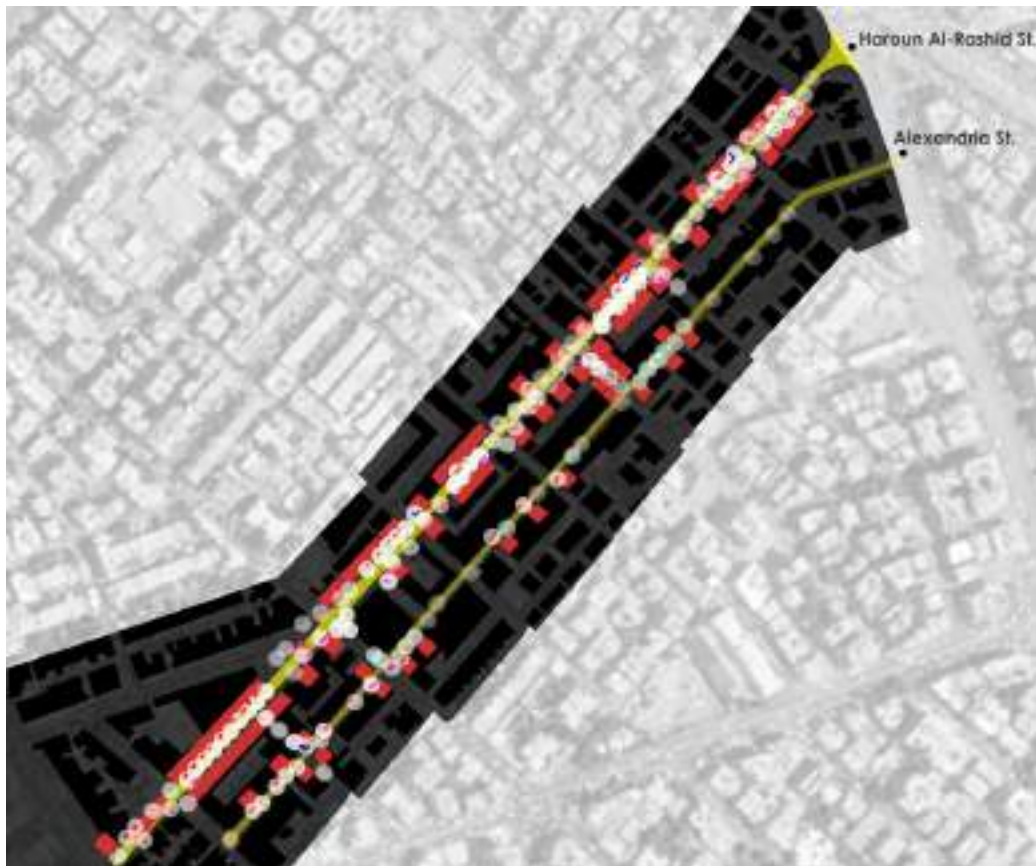


Figure 98 - this map, the solid white illuminated circles represent the existence of more than 4 practices on the sidewalk, while the more translucent circles represent the existence of maximum two practices in this zone of the sidewalk. The red color marks the active facades



The study showed clearly that characteristics of the ground floor facade could have great influence on the pattern of informal practices on the adjacent sidewalks. There was a significantly greater intensity of informal practices in front of open and active facades than in segments with closed and passive facades. This can be clearly shown in figure 98, where the informal practices on Haroun Al-Rashid sidewalks are more and are accumulated in a clustered manner in front of the *active* facades on the ground floor, while on Alexandria sidewalks they are less in quantity, and are more scattered along the length of the sidewalk, depending on the occurrence of *active* or *passive* facades.

#### 6.1.3.2 *Impact on sidewalk maintenance*

Although Alexandria St. is a residential secondary street, where the sidewalks are less occupied with various layers of territorial practices, Haroun Al-Rashid sidewalks were observed to be more maintained. There is around 100 garbage bins on the sidewalks of Haroun Al-Rashid St., provided by the municipality. These bins are all located on the third zone of the sidewalk, with an in-between distance of around 6 to 10 meters (see fig. 99). Every shop owner is responsible for throwing the garbage in the bins to be collected later during the day by the municipality. On the other side, in Alexandria Street, there are few garbage bins (approx. 10), randomly located on or off the sidewalk, and are rarely used by sidewalk users, since the sidewalk and the streets are accumulated with piles of garbage (see fig.99).



**Figure 99** On the left: Garbage bins on Haroun Al-Rashid sidewalks. On the right: Garbge thrown on the sidewalks of Alexandria St. Source: Author

Moreover, in reality, every shop owner/salesman is responsible for cleaning the adjacent area of the sidewalk in the morning, and the municipality has no role in this process. Brushing and wiping the sidewalk everyday is not only a cultural tradition but also a socio-economic-based decision. When these users keep the sidewalk well maintained, they are less subjected to rejection from the residents and the municipality. Each shop user deals with the adjacent sidewalk space as if it belongs to him. The owner is responsible for cleaning it, putting water coolers for clients, and even vendors ask for their permission to stay on [their] sidewalk. The sidewalk space is not perceived as a public space.

#### 6.1.4 Understanding the impact of the Edge effect

According to Jan Gehl, in a study of the preferred areas for stays in Dutch recreational areas, the sociologist Derk de Jonge mentions a characteristic *Edge Effect*, where he identifies that the edges formed by group of trees, building facades, or forests were the most preferred zones for staying (1971, p.149). One obvious explanation for preferring to stay along edges is that is it provides better opportunities for examining the surrounding space (Gehl, 1971). In other words, the user is less exposed than if he were in the middle of a space.

**“One can see but not be seen too much, and the personal territory is reduced to a semicircle in front of the individual.”(Gehl, 1971) The sitters’ back**

in this case is more protected, providing easy access to the adjacent façade. *Edge Effect* thus refers to the preferences of users to stay at the edges of spaces, where their stay becomes more discreet and they then are provided with a better view of the space.

For example, it is clear from the previous analysis that the edge zone becomes an obvious outdoor staying area for shop owners and salesmen in both studied streets. According to Jan Gehl, it is relatively easy to move a function out of the house to the edge zone (1971, p.150). The kind of activities taking place along the edges are the ones who link the indoor functions to the sidewalk life.

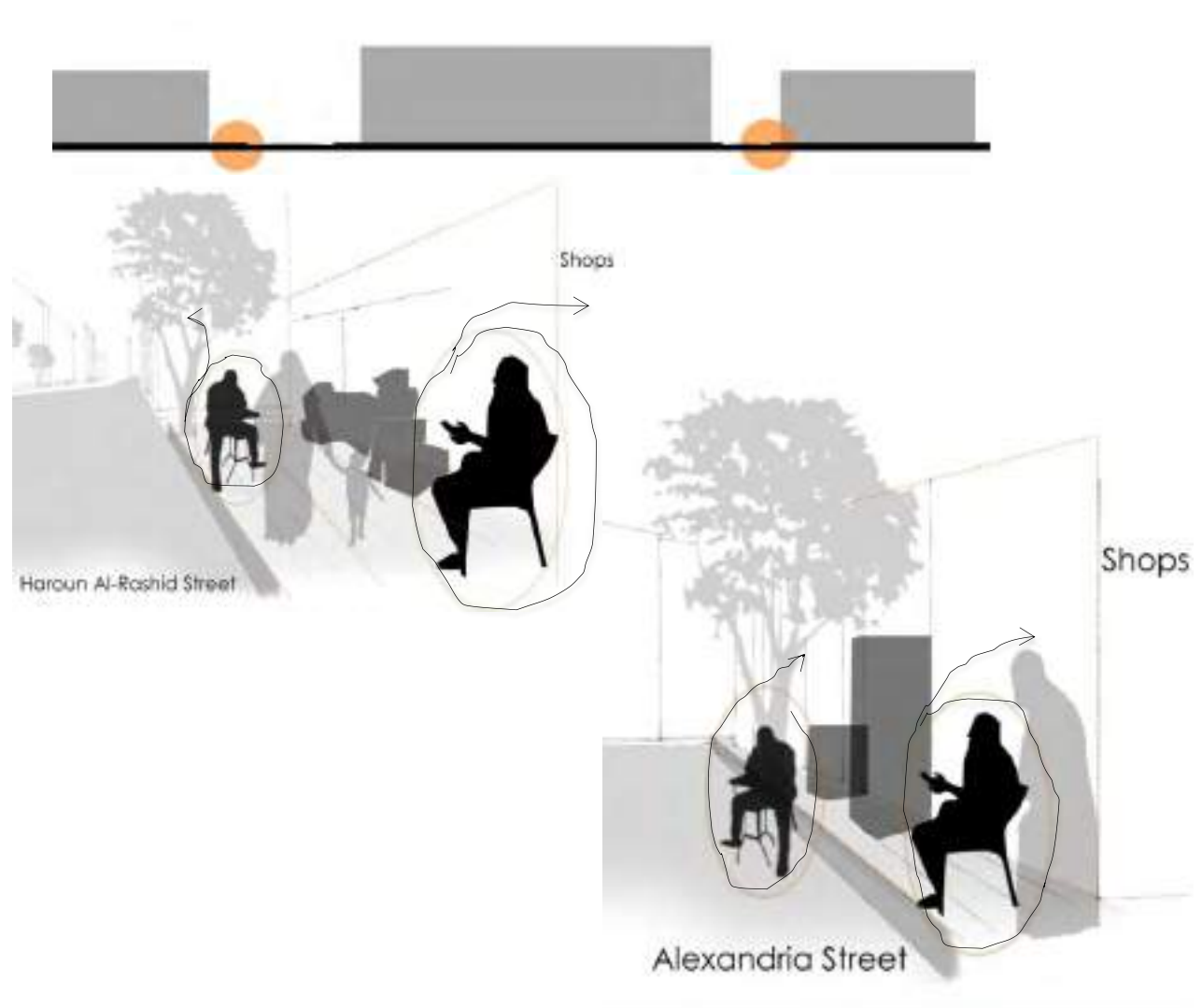
The spatial arrangement of movable chairs on the sidewalks of Haroun Al-Rashid and Alexandria Streets seemed to play an important role in defining the territories of the majority of the informal practices taking place. In Alexandria Street, some chairs are placed either on the street or at the edges of buildings, since there is no enough place on the sidewalk (see fig. 100). However, on Haroun Al-Rashid sidewalks, chairs are either placed beside the edges of the shops or in zone 3 of the sidewalk along the edge of the trees. The number of chairs in Haroun Al-Rashid is triple the number of chairs in Alexandria, since most of the shops in Alexandria Street are closed and displayed for sale.

The number of shared chairs ranges from 1 to 5, in which the number of chairs increases throughout the day (See fig 101). More chairs are added either for clients or for users of the surrounding shops. The chairs used by shop owners and salesmen belong to the shop and are stored inside the shop overnight. However, sometimes they borrow some chairs from the nearest coffee shop for clients or other users (when needed). In Haroun Street, these chairs are shared with other vendors, users, or clients. For example, in Haroun Al-Rashid Street, the supermarket owner shares his chairs with the newspaper vendor next to him. However, in Alexandria Street, rarely do the users borrow chairs from the coffee shop in the street, and they rarely share the chairs with each other.

Even doormen of residential buildings in Alexandria Street usually place their **chairs directly beside the building's entrance. Sometimes, in the middle of the day**, they move their chairs to the sidewalk to sit with the neighboring doormen for tea or coffee. However, they always place their chair along the edges of the



building entrances to allow for a better view for monitoring, securing, and socializing with colleagues of neighboring buildings.



**Figure 100 location of chairs of shop owners/salesmen on both sidewalks. Impact of the edge effect on spatial arrangement of movable furniture Source: Author**

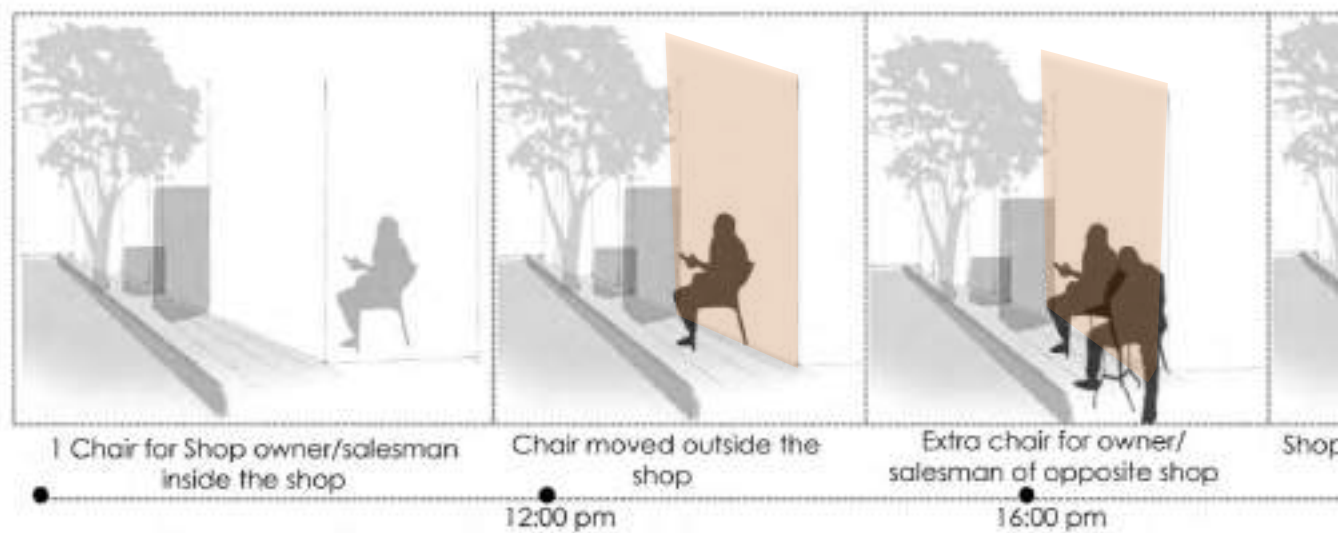
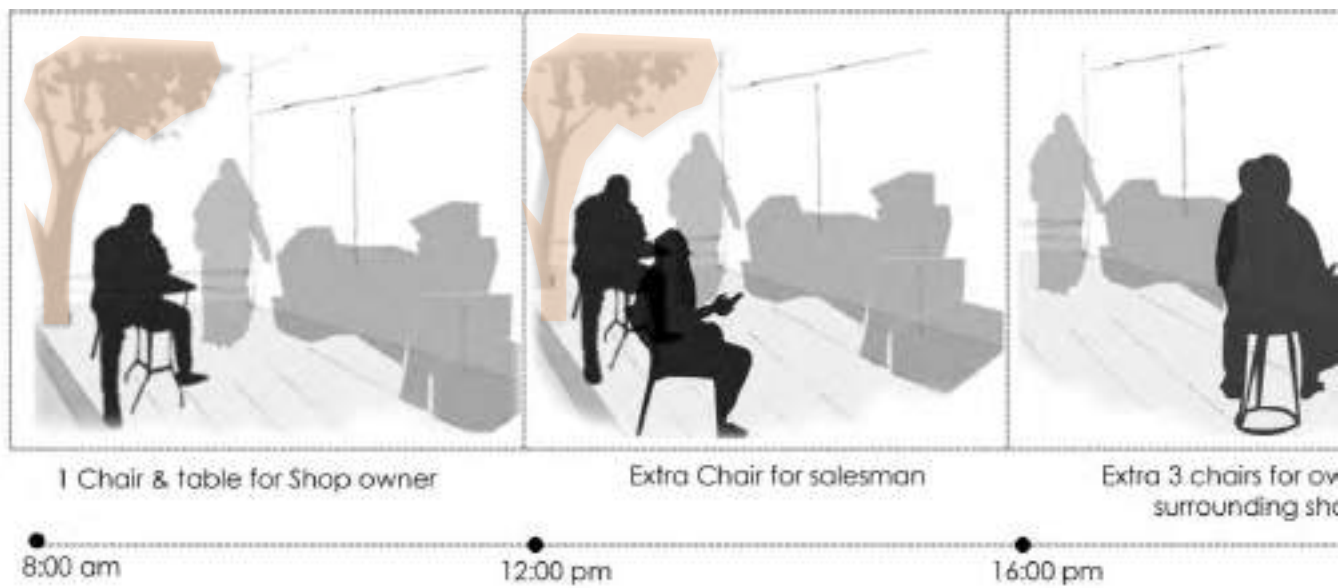


Figure 101 Impact of edge effect on the location of movable furniture throughout the day on both sidewalks. Source: Author



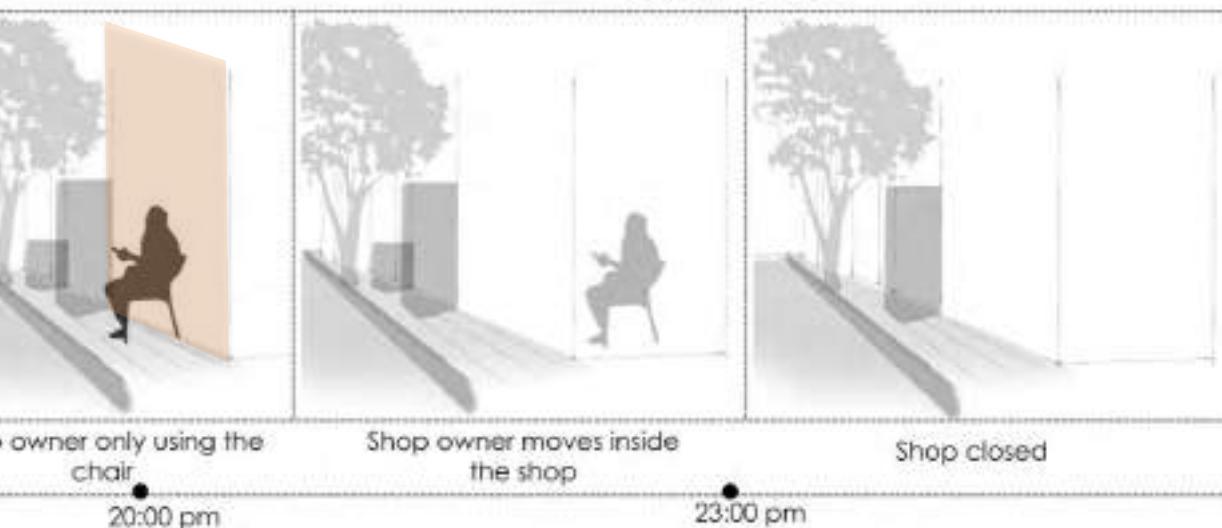
20:00 pm



23:00 pm



Nearby 'Qahwa'



### 6.1.5 Understanding the Impact of the Multiplier Effect

Hillier's main argument is that the configuration of the urban form is the main producer of different movement patterns (Hillier, 1993a). Based on this, he produced the concept of *natural movement*. He defined it as **"the proportion of urban pedestrian movement determined by the grid configuration itself."** (Hillier, 1993a, p.32) In this framework, he considers another important phenomenon, which is the allocation of various functions based on this natural movement, for example, the allocation of various attractors or retail stores at the busy parts of this grid. When this allocation phenomenon takes place, the phenomenon of the *multiplier effect* becomes a key element in the decision of the next allocation action. The located functions then increase the importance of the location itself and other functions start to cluster around them. Therefore, as a result of appropriate relation between the urban structure and movement, different uses produce multiplier effects to each other, which leads to urban vitality; people come with different purposes to join each other.

*"Now, if cities are, as they were always said to be, 'mechanisms for generating contact', then this means that some locations have more potential than others because they have more by-product and this will depend on the structure of the grid and how they relate to it. Such locations will therefore tend to have higher densities of development to take advantage of this, and higher densities will in turn have a multiplier effect. This will attract new buildings and uses to take advantage of the multiplier effect."* (Hillier, 1996)

**Reflecting on Hillier's phenomenon of** multiplier effect, it might be clear that some well-known stores, restaurants, and *Qahawy* are allocated in specific zones in the Haroun Al-Rashid and Alexandria sidewalks based on this phenomenon. Some of them are located around important magnets such as the Mosque or around each other or at the corner of building blocks. For example, the majority of the *Qahawy* are located at the corner of the building blocks along Haroun Al-Rashid Street. However, for the aim of this research, the focus was to understand the impact of multiplier effect on the accumulation of informal practices in certain zones on the sidewalks. Therefore, in figure 102, it

presents the magnets causing the accumulation of informal practices in higher intensity around them.



**Figure 103 impact of the multiplier effect on the accumulation of informal practices on both sidewalks. The red circles represents the magnets and their zones of influence around them** Source: Author



**Figure 102 Examples of informal practices accumulated around the Mosque (one of the magnets).** Source: Author



Another example is the *Qahawy*- in Haroun Al-Rashid and Alexandria Streets. As shown in figure 102, most of the *Qahawy* in Haroun Al-Rashid Street are located at the corner of the building blocks, in between the dense commercial activities along the sidewalks and as mentioned in the space-time map (see fig.83), the furniture of the *Qahawy* are usually displayed on one or two zones of the sidewalk space. This setting attracts other informal practices like shoe polishing and car repairing. Also, they attract other users of the sidewalk (ex: shop owners and salesmen) to place their chairs and tables nearby the *Qahwa* to socialize and be served coffee and tea. The shoe polishers allocate themselves daily in front of the *Qahawy* to serve the clients as well as the passer-by, who usually slow down when passing along the *Qahawy* extending on the sidewalk (see fig. 104). In Alexandria Street, there is only one coffee shop, which occupies the whole adjacent sidewalk area. In this case, some mechanics are located daily in the parking space in front of the *Qahwa* to repair the clients' cars.



**Figure 104 shoe-polishing worker allocating himself daily in front of the Qahwa in Haroun Al-Rashid St. Source: Author**



Another example explaining the multiplier effect is that some well-known stores/restaurants in the area, like GAD and Farrag, act as magnets, where some vendors allocate themselves around them to maximize their profits and reach larger number of clients/pedestrians (see fig. 105). Some vendors rent a part of the sidewalk/street in front of these places daily or annually, while others just take the permission from the owners to allocate their products on the sidewalk.



**Figure 105 Carpet vendor & mobile vendor allocating themselves around GAD restaurant daily.**  
**Source: Author**

Not only do allocated functions or buildings attract informal practices to take place around them, but also some informal practices attract other informal practices to take place around them. For example, a grocery mobile vendor on Haroun al-Rashid sidewalk places his cart in the morning right beside the foul cart (which is permanently located) to share his territory (see fig. 106).



**Figure 106** On the left: Foul cart located in the same place every day. Right: Grocery vendor sharing territory with foul cart on specific days. Source: Author

In other cases, some users **don't only share their territories based on the multiplier effect**, but also **choose to give up “their own territories”**- in their own point of view- for other users. For example, well-known restaurants/stores like GAD and Farrag allow mobile vendors and street vendors to occupy the adjacent sidewalk at specific days/times in order to keep the space alive and use them as nodes for attracting more users/clients. However, some vendors mentioned that they rent this specific space from the owner of these stores to use it for a certain period (ex: school supplies vendors). Others share territories for socio-economic benefits, like the foul cart and the grocery vendor, where they share it only on specific days, these two vendors are usually relatives or friends, and they choose to locate themselves in the same zone to maximize the use of their territory.

On Fridays, the territories expand and the level of personalization of the public space is higher. More space is occupied. In both streets, on weekdays, one or two vendors are involved in the practice, however, on Friday, they can extend to four vendors (family members). Later during the day, especially on Friday, most of the shop owners display their products further in the third zone of the sidewalk, apart from the owners who display their products on the third zone on daily basis, like the outdoor furniture shop and the bakery shops ( see fig.107). On Friday, some users give up their territories for other informal practices to occupy. For example, separate chairs and tables are replaced with street vendors, clothes and toys vendors replace grocery vendors (see figure). Some vending practices only take place on Fridays, usually displaying their products (shoes, slipper, clothes, toys, school supplies, etc.) on a table cloth/fabric on the sidewalk. These vendors took the full advantage of the high overflow of pedestrians in Haroun Al-Rashid Street to share territories for pure economic interests.



Figure 107 the use of the sidewalk space of Haroun Al-Rashid on weekday vs. Friday. Source: Author



22:00 PM

14:00 PM

## 6.2 Conflicts over use of Sidewalk

### State Narratives and Counter-narratives about the sidewalk

The purpose of the research is not only to identify who uses what space on the sidewalks of both streets, but also the system of claims to the space, how people communicate these claims, common terms of allowable uses that have developed, who are the enforcers, and the institutions that legitimate the system.

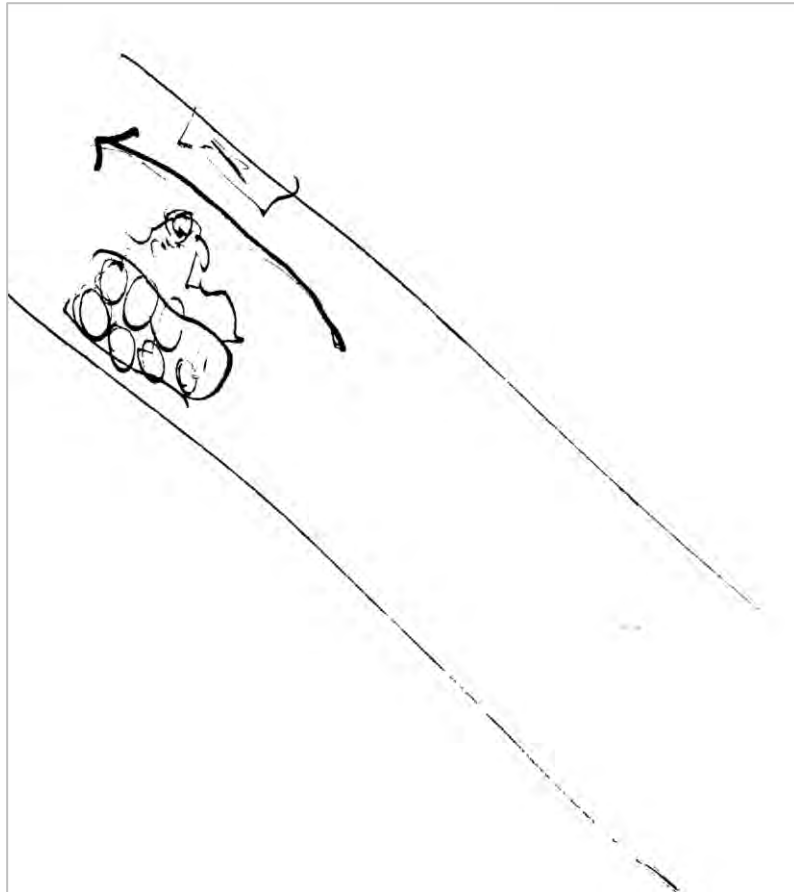
In this section, the purpose is to discuss, compare, and analyze the narratives of the different counterparts regarding the use of the sidewalks. The data collected from the interviews with the different users, the field survey, and the cognitive mapping reflect the existence of points of conflicts over the use and perception of public space.

Pedestrian movement:

- *“We put the pedestrian walking space into consideration”*  
-Hagg Taha, nuts and grocery shop owner in Haroun Al-Rashid St.

When users of the informal practices were asked if they sometimes obstruct the pedestrian walking space, this was a one common reply to this question. Even if the users of these practices occupy the whole adjacent area of the sidewalk, they still legitimize their acts by claiming that they abide to the sidewalk regulations. For example, Hagg taha, is a 50 years old man whose shop has been there for around 40 years. He displays part of his products daily outside of the shop and places his chair and table on the third zone of the sidewalk in front of the shop, He mentioned during the interview that when he feels that the displayed products obstruct pedestrians, he moves them inside the shop. He also mentioned that he prefers to sit beside the displayed products, but he sit on the other side to prevent obstructing the movement of pedestrians. This same interviewee, when asked to draw his image of the sidewalk life, he clearly **identified the pedestrian’s path within his [in]tangible territory** to reflect on his intentions to keep the pedestrian movement clear from any kind of obstruction (See fig. 108).





**Figure 108 cognitive map drawn by a 50 years old shop owner in Haroun Al-Rashid St. S**

- ***“Where are these sidewalks?”***

- Nader, a resident in Alexandria Street

Nader, 55 years old, has been living in a family-shared residential building in Alexandria St. for 30 years, until he moved out to get married. However, he still comes to visit his family and do his grocery shopping on weekly basis. He is very familiar with the neighborhood. When I first approached him to conduct the interview, he was standing on the sidewalk opposite to the bakery shop, putting the bread loafs on the metal racks. However, the first thing he said surprisingly **when I introduced myself and the title of my research is: “Sidewalks! Where are these sidewalks?”**

However, this was a common reply by most of the residents and pedestrians interviewed in both streets. Since most of the sidewalks are either contested with informal practices; as in Haroun Al-Rashid St., or poorly designed & maintained; as in Alexandria St., they are usually undervalued and undermined. The sidewalk and the street are thus perceived as one entity, not differentiating between the vehicular and pedestrian uses. **This doesn't apply** only to the two case studies; however, it applies to the majority of the sidewalks in Egypt. *"The disappearance of the Egyptian Sidewalk"* - *"2ekhtefaa2 el raseef el masry"*, has always been a debatable topic discussed on TV talk shows and newspaper articles.

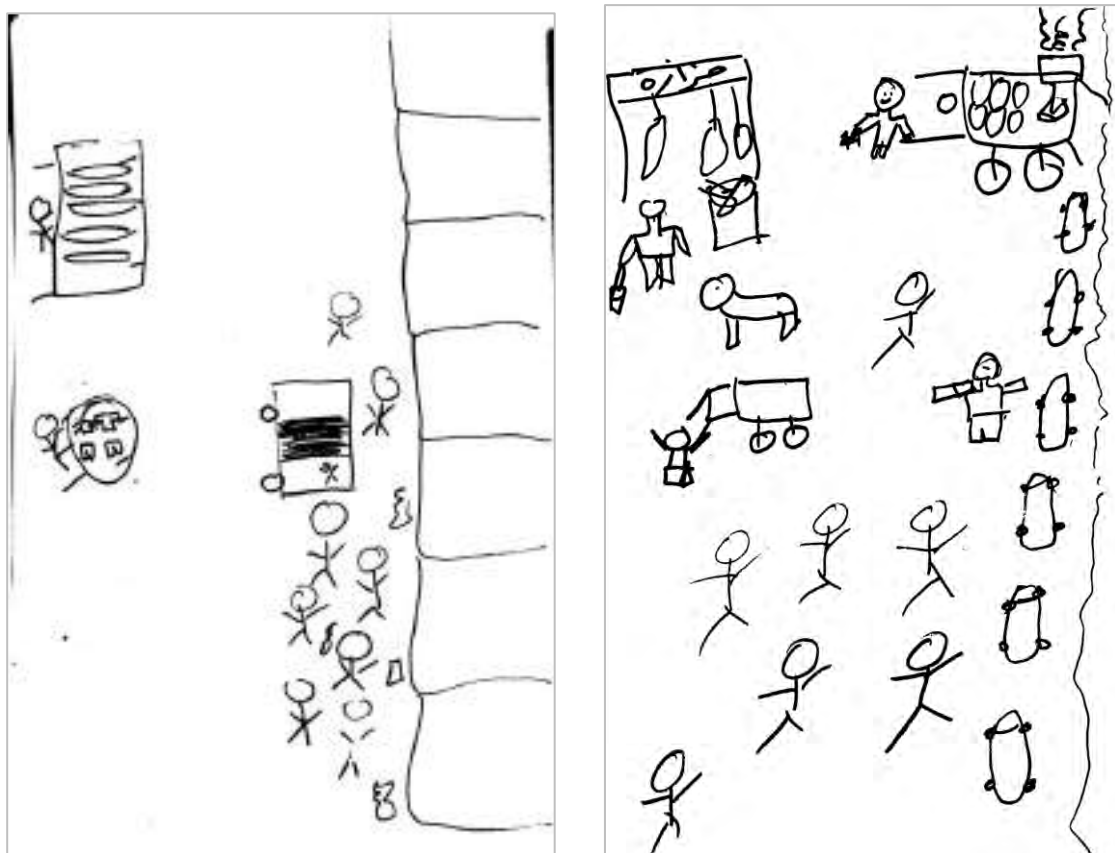


Figure 109 On the left: cognitive map drawn by 25 years old female, describing the image of Haroun Al-Rashid sidewalks . On the right: Map drawn by a 60 year old lady, describing the life on Alexandria sidewalks.

This was also reflected in some of the cognitive maps conducted by pedestrians on both streets. The majority didn't recognize the sidewalk as a separate space from the street; however, they described their walking experience on the street as a whole; including the sidewalks (see fig.109). This phenomenon shows that although the definition of the sidewalk states that it separates the pedestrian movement from the vehicular circulation, pedestrians tend to rarely maintain

their walk on the sidewalk, and they instead walk in the street, because of the informal practices taking place on the sidewalks. The perception of pedestrians are always that the street is clear for walking, and the sidewalks are never clear from obstacles (always disconnected). Irrespective of the width, clearance, cleanliness, level of shading of the sidewalk, if a pedestrian needs to walk, it's faster and easier to walk on the street.

- *“Informal practices can stay, but we need a space to walk”*
  - Frequent visitors
  -

As it was mentioned previously in the analysis of the sidewalk use patterns, the use of the sidewalks in Haroun Al-Rashid Street was shown to be more mature and organized, compared to the sidewalks of Alexandria Street. However, according to the online survey, 92% of the respondents mentioned that they have to pass through the street during their walk on Haroun Al-Rashid sidewalks (see fig. 110). Moreover, 50% of the respondents mentioned that the first thing that comes to their minds about the sidewalks of Haroun Al-Rashid St. is the narrow walking space on the sidewalks (see fig. 112). And when asked, **“what kind of practices would you like to maintain on the sidewalk of Haroun Al-Rashid?”**, 30% of the respondents stated that they don't mind keeping the informal practices as they are on the sidewalk, but would recommend wider space for walking (see fig. 113). However, 8% only recommended completely clearing sidewalks for pedestrians only.

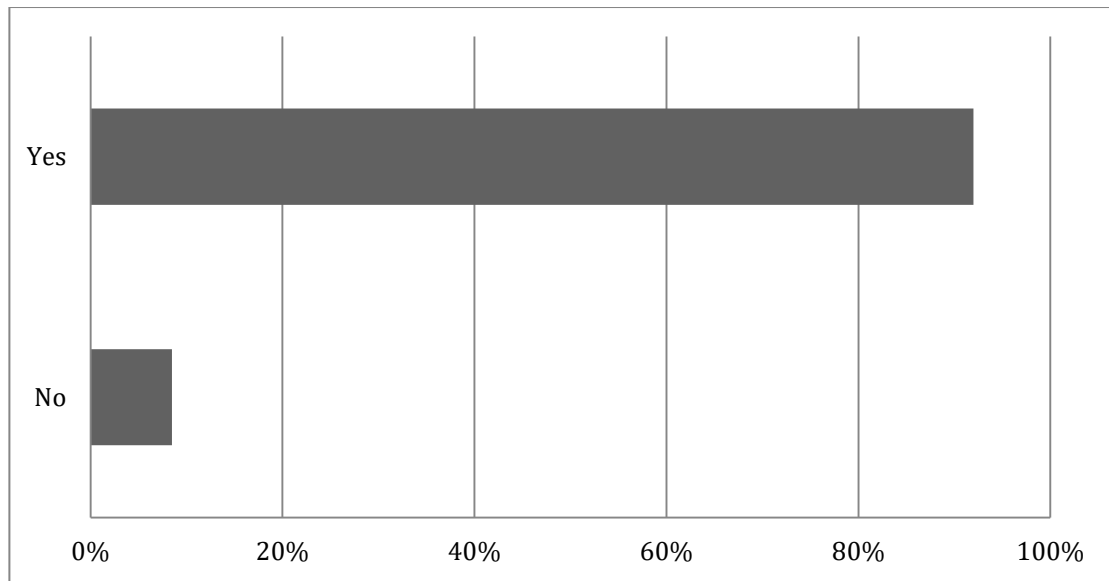


Figure 110 Results of online survey: Question: 'Do you have to pass through the street during your walk?'



Figure 111 Results of online survey. Question: "How would you describe your walk on the sidewalks of Midan Al-Gamea?"

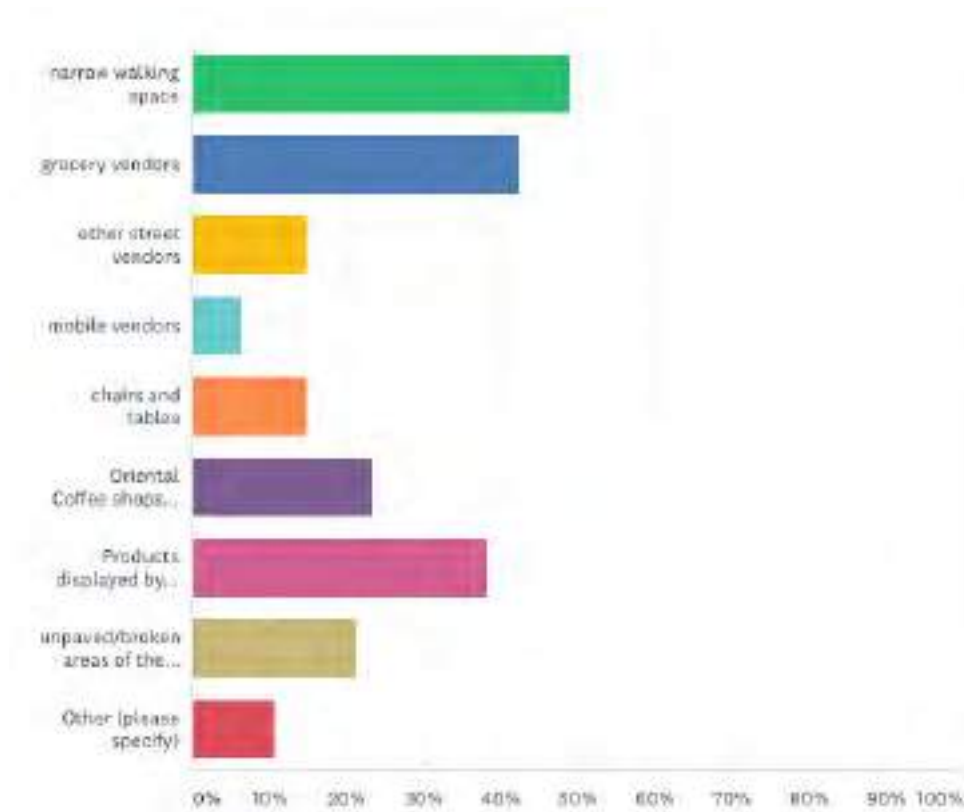


Figure 112 Results of online survey. Question: "What first comes to your mind when thinking about the sidewalks of Midan Al-Gamea?"

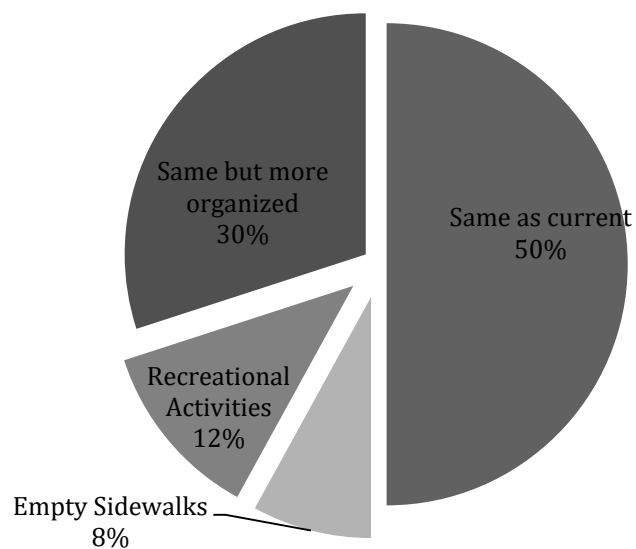
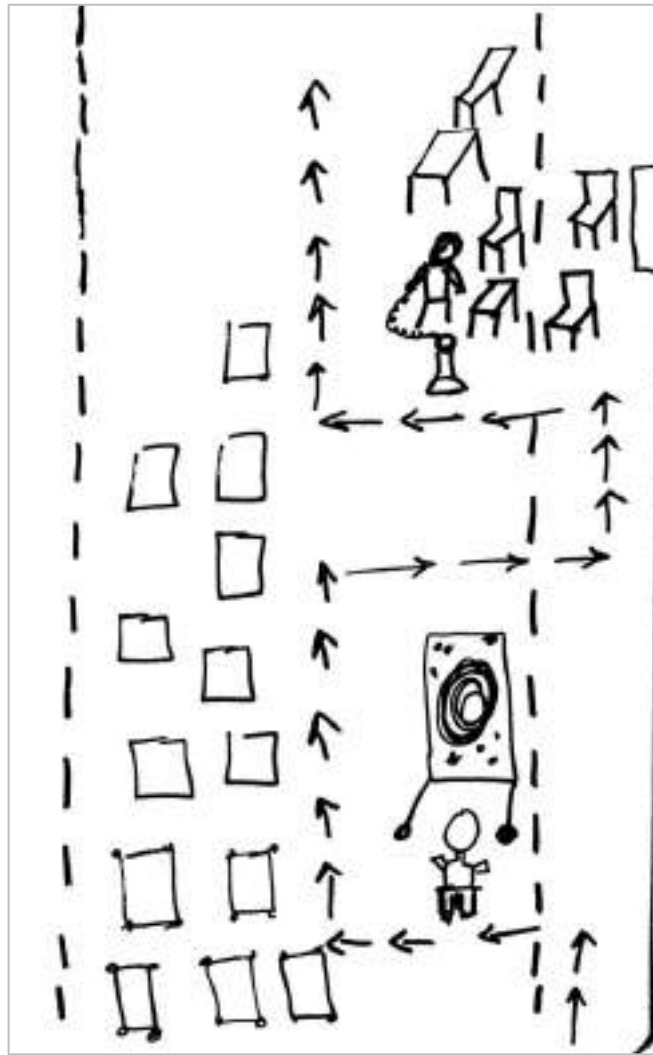


Figure 113 Results of online survey. Question: "what kind of practices would you like to maintain on the sidewalks?"



**Figure 114 Cognitive map drawn by a 30 years old lady, who lives in Heliopolis. It describes the life on the sidewalks of Haroun Al-Rashid.**

The difficulty of maintaining the pedestrian's movement on the sidewalk was reflected in the majority of the cognitive maps conducted by visitors. Some of them boldly marked their direction of movement between the sidewalk and the street, while clearly describing the type of informal practices affecting their movement patterns, and also, clearly reflecting on their obligation to pass through the vehicular traffic, which also has an impact on their walking experience. (see fig 114)

Zoning of Informal Practices:

- *"It's a father-to-son practice"*  
-Om Ahmed, grocery street vendor in Haroun Al-Rashid

From the analysis of the different patterns of uses of informal practices on the sidewalks, it was clear that these users usually locate themselves in certain places on the sidewalk to mark their territories in an intangible way, and

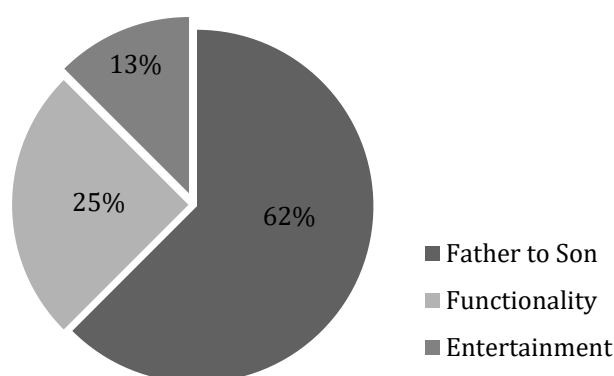


also for pure functional and economic reasons. When the users on both sidewalks were asked about the reason behind their choice of location in their specific place on the sidewalk, 62% mentioned that they have been located in the same place on the sidewalk for years. Their grandfathers and/or fathers used to occupy the same zone in the same way or another. Therefore, they are extremely familiar with the space, the residents, other shop owners, frequent visitors, and even the police officers from the municipality.

According to the police officer, they choose their specific location to frequent **based on where the police won't chase them as often, where they can approach** the wealthiest customers, and where the residents and shop owners will let them stay. He mentions the following:

*“In Haroun Al-Rashid Street, all users of informal practices have been there for a very long time, they know very well how to deal with the police visits and how to defend themselves. They are most of the time familiar with the times of the visits and the officers. However, in Alexandria Street, although most of the users and the practices have been there for a long time too, residents regularly complain about any informal practices taking place on the sidewalks. Besides, as a narrow secondary street, the sidewalks are not inviting for informal practices to take place. Another important factor behind the maturity of informal practices on the sidewalks of Haroun Al-Rashid more than Alexandria Street, is the existence of more jewelry shops in Haroun Al-Rashid. Therefore, it is more organized, and consistently regulated.”*

– Police Officer in the municipality of Masr Al-Gadida



**Figure 115 Results of interviews conducted with users of informal practices. The chart presents the choice of location on the sidewalks.**

However, the zoning of the sidewalk spaces by the informal practices, was rarely reflected upon by pedestrians, it was only identified on some maps conducted

by the users of these practices. The pedestrians who were asked to draw cognitive maps for both streets, rarely described the zoning of the sidewalk, but rather the overall picture of the two streets (see fig. 116,117). For example, Haroun Al-Rashid St. was mostly described by drawing cars on the streets to reflect on the dense traffic, and the sidewalk spaces to be fully occupied with pedestrians and vendors, while Alexandria St. was described/imagined by focusing on specific landmarks in the Street ( like the Butcher and the *Qahwa*), since these are the practices that they probably interact with. The emphasis in Haroun Al-Rashid St. is on the overall chaos, while in Alexandria St. is on the few informal practices enclosed by residential buildings.

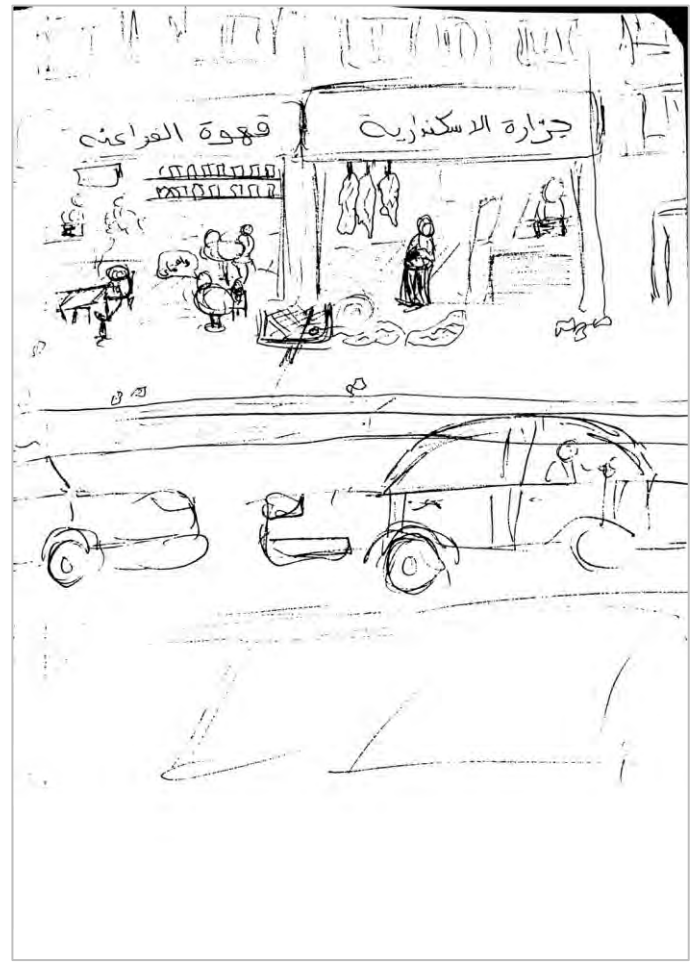
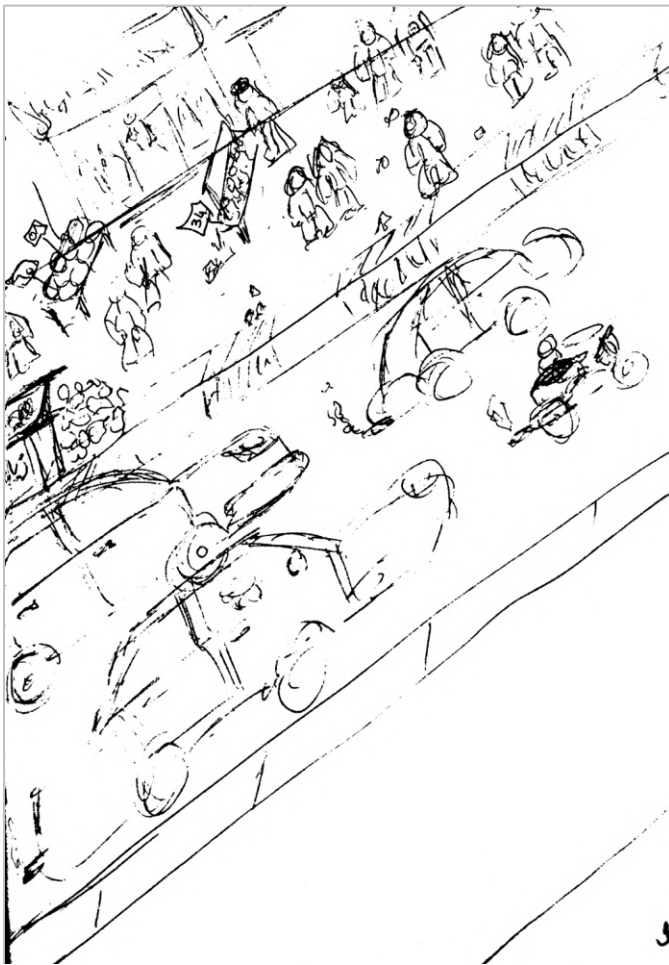


Figure 117 - on the left: cognitive map drawn by a 35 years old man, describing Haroun Al-Rashid sidewalks. On the right: Same person draws the image of the sidewalks of Alexandria St.

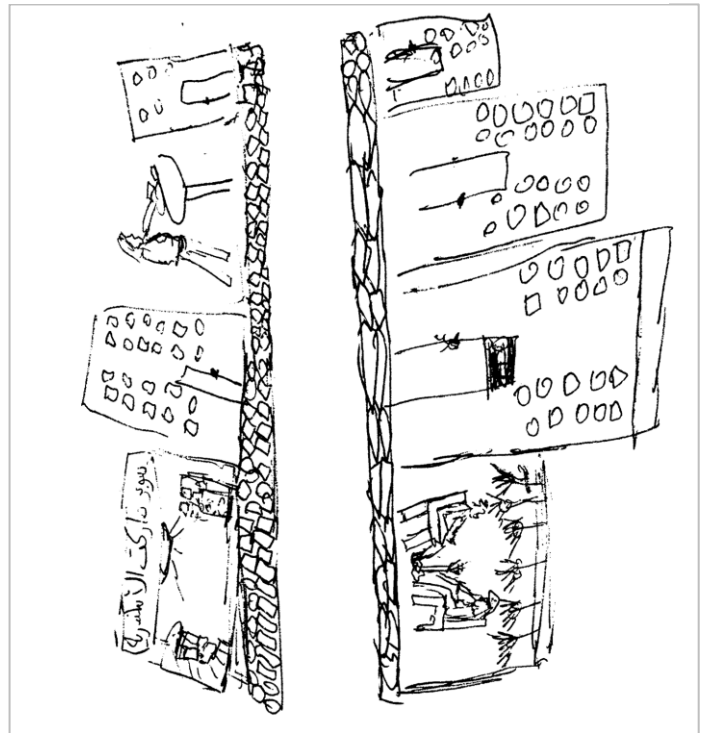


Figure 116 - . One the left: Cognitive map drawn by 18 years old girl, describing the image of haroun Al-Rashid sidewalks. On the right: same person describes Alexandria sidewalks

## Legitimacy to occupy the Sidewalk

*“The only legitimate act on the sidewalk is walking”*

- Police Officer

According to the law no. 140 for year 1953 concerning the use of public streets (See Appendix E), no unlicensed practices from the concerned governmental entities is allowed to take place in public streets. In this law, there **isn't a specific** regulation stated regarding the use of the sidewalks. However, it is mentioned that this law applies to any kind of practices obstructing the movement of cars and pedestrians like street vendors or the display of products.

In general, according to the police officer, any practices other than walking are not accepted by law to take place on the sidewalk, disregarding the level of impact of this practice on the surrounding. All informal practices on the sidewalk, whether static or dynamics acts, should be abandoned. Although some practices are less dominant and have lower impact on the surrounding than others, these practices should also be subjected to rejection from the municipality.

However, in reality, he mentioned that some passive practices like separate chairs and tables, parked motorcycles, or malfunctioning objects on the sidewalks are less subjected to rejection than the street vendors and the extension of shops on the sidewalk.

Moreover, he mentioned that despite the fact that using different tiles on the sidewalk to mark informal territories is considered as a personal alteration **to one of the state's property**, users are rarely subjected to any rejection from the municipality. He stated that this is most of the time perceived by residents as a way of maintaining the sidewalk. Similarly, the water coolers placed by shop owners on the sidewalk were rarely a subject for negotiation between the owner and the municipality.

**According to the officer:** “Users performing these kind of practices do them to avoid any kind of rejection from the residents and the municipality. **It's** exactly like placing a small mosque (*zawya*) on the ground floor of an illegally-built building on agricultural lands, where the municipality can never demolish it according to the law stating that no mosque is to be demolished for any reason.”

- “Of course, Everything is licensed ”
  - ‘Am Ibrahim, *Qahwa* owner in Alexandria Street

Some users of informal practices claim that any form of extension on the sidewalk is licensed. This is another familiar quote mentioned by most of the users of informal practices during surveying. For example, the owner of the *Qahwa* in Alexandria Street; occupying the *whole* adjacent sidewalk space, leaving no space for pedestrians to pass, mentions: “I only place my chairs and tables on the *licensed* sidewalk space, however, sometimes we are exposed to rejection.”

Also, according to Hagg Nasser, an owner of a hardware shop in Haroun Al-Rashid: “*When shops extend to the sidewalk space, they are obliged to pay a certain amount of money, depending on the area occupied on the sidewalk. For example, I pay 800 L.E every year to extend for 40 cm beyond the original premises of the shop.*”

However, according to the officer, this is not valid, since according to the law, no practice of any kind is legitimized to take place on any of the **state’s** properties. The law no. 140 for year 1953 concerning the use of public streets states that signs displayed by shops should not exceed 40\*30 cm, with maximum protrusion of 5 cm. Which shows that users legitimize their acts in their own way by stating false information to prevent rejection.

He also mentioned that very few users of these informal practices pay the fines that they are obliged to pay, and the majority (if not all) of them give bribes to officers and other people in charge to keep them on the sidewalk.

However, according to the law, most of the informal practices on the sidewalks are subjected to rejection based on one of the following laws:

- “*Building without License*”- “بنى بدون ترخيص”: Any form of practice occupying a space on the sidewalk, such as: extension of shops, street vendors, or even sitting, are considered illegal. In that case, users are obliged to pay 300-500 L.E as a fine.
- “*Illegal alterations to state’s property*”- “تعدي على ممتلكات الدولة”: The user in this case is obliged to pay a fine of 3,000 L.E, and/or can be arrested for performing any illegal act or alteration to **the state’s property**.

- *"Removing obstructions based on complaints"*- "إزالة أسباب الشكوى": The police give users the chance to remove any obstruction on the sidewalks based on the residents' complaints, if they don't, then they are arrested or obliged to pay fines.

In all cases, according to the officer, any furniture illegally placed on the sidewalk, is removed by the police and taken **to the municipality's warehouse, where the users are then obliged to go to the municipality's office and pay the** stated fines to get their products/furniture back. Also, the police officers in charge take the IDs of the users to municipality office. Some people cannot afford to pay the money, so they leave their products/furniture in the **municipality's warehouse.**

- *"These practices will keep on happening anyway, the government cannot stop them"*
  - Municipality, User, and Pedestrian

This is another common statement mentioned by the different counterparts. The police officer states that "these practices are turning into permanent acts on the sidewalks. Even when users are obliged to pay fines, they pay it and they stop for couple of days, then they do it again. Therefore, it can be clear that these practices have been taking place in most of the sidewalks around Egypt, and the municipalities always fail to stop them. **There are plenty of regulations regarding the use of the sidewalk that aren't** applied, although being very strict. For example, there is:

*"Infringement of environmental laws"*- "مخالفة قوانين البيئة"; where the citizen should pay 10,000 L.E as a fine for throwing garbage in the street.

According to the officer, the rules and regulations themselves haven't changed through time but the values of fines have changed. For example, in the past, if anyone cut a tree down, he/she was obliged to pay 1,000 L.E, today, they are obliged to pay 10,000 L.E.



The reason behind this is not only that these practices are above the law, according to the officer; it is mainly because of corruption and not abiding to stated rules. The main problem, according to him, is that these laws and regulations are rarely applied.

*“We receive a monthly schedule from the governorate including either visits for specific streets (usually main streets), or visits for removing specific practices (such as: fruits vendors in specific streets/neighborhood). These orders are usually based on complaints from residents, important events taking place (like matches), or because important public figures will be passing by the chosen street/neighborhood.”* He also mentioned that most of the time, complaints coming from residents who are in power, or knows someone in power (wasta), are the only ones put into consideration. In case these complaints are put into consideration, then the law labeled as “2ezalet asbab el shakwa” is applied to users.

In evidence to that, for example, according to Am Hussein, a doorman of a company-owned building in Alexandria Street, he states:

***“I have been placing my chair directly beside the building’s entrance for 30 years. I was never subjected to any rejection or conflicts from anyone. However, one day, the major general’s wife living in the next building called the police to arrest me for placing my chair few centimeters beyond the entrance on the adjacent sidewalk. I was shocked, and the officer mentioned that they were not to arrest me, but that its better if I keep my chair off the sidewalk completely to avoid any conflicts with this resident.”***

Therefore, this shows that although this act is considered as a “passive” informal practice ( have low impact on the residents and the pedestrians), **‘Am Hussein** was encountered only because the resident who complained about him is in power.

## 6.3 Reflection

The aim of this chapter was to seek answers for the research questions addressed earlier and develop an in depth analysis and interpretation towards the findings. Based on that, the aim was to understand the principles behind the demands of users practicing these informal activities on Sidewalks, the motives behind their territorial behaviors on the Sidewalk premises (or beyond its premises), the factors facilitating the existence of these practices, and the perception of the various actors involved.

**In the first section of this chapter, the researcher's aim was to** clearly describe the factors and motives behind the spatial patterns of the informal practices identified in chapter 5, on the sidewalks of Haroun al-Rashid and Alexandria Streets.

It is important to highlight that the outcomes/results from the various factors and motives addressed **aren't solely dependent on these factors**, they are results of more than one factor. In other words, the spatial patterns of informal practices and the way in which their users define their territories are a result of the interrelation between the various factors and motives addressed. For example, the active façade on its own is not an effective factor without the presence of an adjacent adequate sidewalk space facilitating the effectiveness of the impact of the presence of active facades. Also, some spatial and behavioral patterns, like the accumulation of informal practices in specific zones on the sidewalks, are results of a combination of the impacts of the multiplier effect and the type of ground floor façade (active/passive). However, for the purpose of clearly organizing the impacts of these factors and motives, the researcher explained each of them solely in the first section.

However, in the second section, the aim was to understand the system of claims over the use of the sidewalk space and the conflicts over its use. This was implemented through addressing the narratives of the different actors involved to understand how people communicate these claims. Not only that, but also by explaining the current laws and regulations over the use of the sidewalk and understand how users of these practices legitimize their territorial behavior on

the sidewalk. This was done by comparing and analyzing the narratives, the results of the online survey, and the cognitive maps conducted with the various actors.

From the analysis conducted in this chapter, it can be concluded that, first, the conflict between the state narratives and the counter narratives reveals basic disagreement about the legitimacy of informal practices as a livelihood and basic purpose of public space. It was clearly shown that users of informal practices claim that they have the complete right to occupy the sidewalk space, and that they are legitimized to occupy the sidewalk, despite the fact that according to the law, these practices are completely illegitimate.

Moreover, the municipality fails to apply the laws and regulations regarding the use and maintenance of the sidewalk because there is a conflict between the social, cultural, and economic needs of the community, and the legitimacy of its existence.

There is also a clear contradiction between the perception and the actual needs of the visitors and pedestrians using both sidewalks. They tend to seek keeping the value of the space, keep the environment safe and alive, and as well as maintaining the cultural and economic aspects of buying cheaper products. This was clear in the results of the online survey, where the visitors reflected their frustration regarding the difficulty of maintaining their movement on the sidewalk, however, common respondents suggested keeping the informal practices on the sidewalks in a more organized and well-managed manner. Therefore, there is a clear conflict between what is allowed and what is needed.

It can even be interpreted that pedestrians who conducted the cognitive maps tended to draw/mention the informal practices that they interact with and also what influences their navigation on the sidewalk. Despite the fact that these pedestrians were asked to draw/describe the image of the sidewalk that they have in mind, all of the cognitive maps conducted included at least one of the informal practices identified in this research.

Second, one significant conclusion can be that the sidewalks of Haroun Al-Rashid St. are more maturely contested than those of Alexandria St. Linking the historical development of both streets with their current condition, it can

be interpreted that at the time when the overflow of pedestrians from Haroun Al-Rashid Street to Alexandria Street took place, it introduced the potential of informal practices in Alexandria St. (*Multiplier effect*). However, when it was retreated, it left the potential and the few informal practices with no regulations. However, Haroun Al-Rashid St. is managed as a vibrant/main commercial street, where the users of informal practices respect this phenomenon and always try to keep the space clean and well managed. In Alexandria St., informality was introduced based on the economy that was flourishing in *Midan Al-Gamea'* at a certain time. Therefore, the situation in Alexandria St. became worse than Haroun Al-Rashid St., and even worse than how it was in the past; purely residential.

In other words, Alexandria St. was left in a grey zone, where the intensity of **informal practices on its sidewalks doesn't trigger the existence** of a self-regulated system to these practices within the various users. The users are not occupying the space collectively, and thus, it can be interpreted that the space was left immaturely contested, and that might be a logical explanation for the current situation.

For the residents of Alexandria St., since the commercial uses are invading the street, and the whole space is becoming noisy and unclean, the value of the assets will not move unless the residents sell it as a clinic or any other commercial use, which then the revenue is higher. So, there is a need to acknowledge the new function of the space and benefit from it even indirectly.

However, in Haroun, Al-Rashid St., other counterparts (residents) are benefiting from the existence of informal practices, which are mainly depending on the ground floor commercial activities. In other words, residents have already started renting/buying their properties for other commercial uses/ services to increase their revenue. The whole environment in Haroun Al-Rashid St. has been settled and managed as a mature commercial space. In Alexandria St. , the commercial uses on the ground floor are still not fully acknowledged by the residents, it is still in the phase of negotiation with the users of informal practices, whether for occupying their private parking spaces, leaving garbage on the street, or causing noise. Till today, commercial activities are still invading the space and negotiating their presence.

Despite the fact that the focus of the research is on the spatial analysis of these practices, it is important to mention that these practices are not only outcomes of the physical, social, and cultural setting, but also a result of the existing weak and corrupt political environment misguiding and neglecting their existence on the sidewalk space. Therefore, it can be understood from this analysis that the phenomenon of informal practices on the sidewalks, and its spatial arrangement are a result of complex and interrelated layers of factors, motives, principles, and perceptions that guide and facilitate its occurrence. These practices will not exist on the sidewalk space unless the whole physical, social, political, and cultural environment is structured in a way that would facilitate and trigger its existence.

Therefore, the analysis of the phenomenon on the sidewalks of Haroun Al-Rashid and Alexandria Streets reveals that the users of these practices have the potential to organize and adjust the sidewalk space in a mature way, only if they are given the opportunity. They already personalize the sidewalk space in their own way, in a way that would serve their social, economic, political, and functional interests. However, the analysis showed that the territorial decision is most of the time based on socio-economic interest: whether this activity is accepted to take place on the sidewalk or not, and the level of economic benefit. When the economic benefit of a certain practice is sufficient for the users, they will take care of the surrounding space on the sidewalk. They would keep it maintained, arrange it well and make the space more inviting. On the contrary, if users are not making enough money out of this practice, then the space will be left over and poorly maintained. In return, the context will welcome this user if the outcome is beneficial to the majority of the involved actors/entities.

# Chapter 7



## 7 Conclusion and Recommendations

### 7.1 Conclusion

This research was conducted in a way that would integrate theories and literature with on-ground human behaviors and practices on one of the vital public spaces of the city: its Sidewalks. The general aim was to address informality in the way **its affects people's everyday life through forms of** informal practices taking place on the sidewalks of formal neighborhoods in Cairo, where there is a strong juxtaposition between *formal* and *informal*.

Since there was insufficient amount of data/literature addressing the phenomenon of daily informal practices on sidewalks, especially in Cairo, the author attempted to review the available literature on the significance of studying the streets and sidewalks as vital public spaces, the everyday social behavior in public space, and the significance of the images and meanings of the street. This literature was reviewed with the objective of contextualizing the phenomenon of informal practices on Cairo sidewalks within the framework of theories and literature. Reviewing this literature played an important role in developing a better understanding of how to scientifically and systematically investigate this phenomenon. It was also crucial for the author to try to understand and track the historical development of this phenomenon in the context of Cairo, despite the lack of literature about it. In general, it was clear that Cairenes always valued the outdoor space, whether the alleys or the sidewalks, more than the buildings enclosing these paths. The street life in Cairo, in its socio-cultural setting, plays an important role in identifying the **significant features of the Cairenes' identity, where the outdoor space uses are** a display of several activities for the residents and the other users.

However, in the first three Chapters of the research, the author aimed at developing a comprehensive framework of the phenomenon, where the fieldwork and analysis was based upon.

Based on the information obtained, the researcher investigated who was performing informal practices on the sidewalk of a small part of the city, how much space they used, what they were doing, and when. The researcher also

studied their interrelationships with others in the space as well as with the state enforcement agents, and the informal negotiations of the terms of entitlements and liabilities as they evolved over time and varied by authority. The purpose of using various research tools and mapping techniques to study the spatial and social dimensions of informal practices on two different yet very close sidewalks was to try to find answers to the research questions mentioned earlier: What are the principles behind the demands of users practicing these informal activities on Sidewalks? What are the motives behind their territorial behaviors on the Sidewalk premises (or beyond its premises)? What are the factors (social, spatial, economical,..etc) facilitating the existence of these practices? How do pedestrians on the Sidewalks perceive these informal practices? How do the users of these practices perceive their territories on sidewalks? How can the study of these spatial practices be implanted in the urban planning system/procedure?

The aim of this research is not restricted to documenting the taxonomy of sidewalk uses in a *formal* middle-class neighborhood. However, the bigger objective was to develop a better understanding of how sidewalks can be managed and designed in a more effective, inclusive, and diverse way to fit the needs of the community. It was clear from the research that the empty space of the sidewalk acts an independent entity. Individuals are competing over the use of this space. However, there is a context to this space: the municipality, residential buildings, parking spaces, visitors/clients, and users of informal practices. Therefore, the sidewalk **couldn't** be investigated independently, however, it was investigated in relation to its surrounding social and physical context. Moreover, following the theories in environmental psychology and understanding of place, an effective way to better understand human needs and preferences on neighborhood vital public spaces like the sidewalks was to empirically study the interrelationships between the characteristics of the sidewalk (including its uses, physical characteristics, and the management of the uses and the space), the behaviors (actions), as well as attitudes (feelings) of the users through both observational techniques and user evaluation.

The importance of activity patterns in keeping the public space alive, safe, and vibrant, as mentioned by many theorists and urban planners, like Jan

Gehl and the theory of place, was evident in the comparison between the sidewalks of Haroun Al-Rashid and Alexandria streets. However, in this framework, the informal practices on the sidewalks of Haroun Al-Rashid can be defined as *“the overly practiced version of vibrant life between buildings”*, it intensely increased by time, and accumulated until it turned into a permanent complex phenomenon, reflecting a need that is neglected, negotiated, and sometimes rejected. The studied informal practices on the sidewalks of Haroun Al-Rashid Street, regardless their level of negative impact on the surrounding, were shown to be keeping the space alive, vibrant, and well maintained compared to Alexandria Street. Over more than 40 years, relationship between the different users of the space has developed greatly; therefore, there is little negotiation over the use of the sidewalk space. Informal practices on its **sidewalk can be defined as mostly “permanent”**, since the spatial arrangement of the sidewalk have already been negotiated several times until it reached its ideal phase. Residents, visitors, shop owners, and pedestrians were shown to be in need of many of the informal practices for various purposes, whether economic, functional, or socio-cultural reasons. **Therefore, the community’s** need for these practices in Haroun Al-Rashid Street is another significant reason behind the maturity of the sidewalk space. However, Alexandria Street was always a pure residential street, and the analysis reflects that its sidewalk users are still in the process of developing and formulating the space to accommodate more informal practices. Most of the informal practices existing are in the shape of parked motorcycles and malfunctioning objects, which are less dynamic and vibrant than the ones on Haroun Al-Rashid sidewalks, and they involve less number of users. Besides that, the sidewalks are very narrow and not well maintained and designed. Therefore, they are still fighting over the use of space, and fighting to mark their territories on the sidewalk. One motive behind this process is the close proximity to the vibrant commercial environment of Haroun-Al-Rashid Street, which has developed and transformed historically to gradually accommodate the various territorial layers of sidewalk use.

The research concludes by suggesting that the empirical study of the interrelationships between the characteristics of a public environment such as

a sidewalk and the behaviors (actions) as well as attitudes (feelings) of the users provides an appropriate basis for planning and design of the sidewalk/street.

This study is not intended to suggest that the specific spatial patterns of behaviors of the informal practices on the sidewalks of the two streets studied are representative of all possible behavioral and physical patterns. It is likely that neighborhood commercial and residential streets or similar settings in other cultural contexts may have a different array of such patterns.

Moreover, the scope of the research is not to propose the kind of alterations that need to be applied to the laws, but to create a comprehensive database and tool box of how the life on the sidewalks, as an important public space with unique character in Cairo, can be investigated and understood as a phenomenon that never give up.

## 7.2 Recommendations

The research focus is not to propose laws and regulations regarding the sidewalk use, legitimize all informal practices taking place on the sidewalks, or to propose the specific kinds of alterations that should be applied to the existing design of the sidewalk. The purpose is to systematically organize and formulate the spatial patterns of the various typologies of informal practices on the chosen sidewalks, by using various data collection methods and representation techniques collectively, to work as a comprehensive documentation tool for urban planners, researchers, and state officials, to be able to plan and adjust the codes, regulations, and design regarding the sidewalks to fit the needs of the community. From specifically investigating two streets in Heliopolis, the author attempted to propose universal recommendations regarding this complex phenomenon.

### State Officials/Municipality

Laws and regulations regarding the sidewalk use were shown to be rarely applied, and the responsible entity to be weak and corrupt. On the other hand, as mentioned in the previous chapter, the users of these practices showed to have the potential to organize and adjust the sidewalk space in a mature way, only if they are given the opportunity. Therefore, there is a crucial need to re-

adjust the policies concerning the sidewalk use to fit the needs of the community, since the informal practices are continuing to take place despite all the trials to eliminate them. Not only it is important to re-formulate the policies regarding the sidewalk use, but also to specify the maximum areas allowed to be consumed on the sidewalk and the minimum distance to be left for pedestrian circulation. Therefore, the spatial arrangement and zoning of these practices on the sidewalk should be clearly managed and supervised by the municipality. And since these practices are taking place on daily basis, there needs to be a win-win solution reached between the users and the municipality in order to benefit both counterparts. For example, it was mentioned by the officer from the municipality that the allocated budget of the municipality is very low, and this might be another good reason why it is incapable of doing its job. Therefore, these patterns of these practices should be understood and identified in a way that would facilitate the process of legitimizing some of them, if possible; same as legitimizing kiosks. Users of informal practices can be obliged to pay taxes for their existence on the sidewalk, on condition to respect the maximum boundaries of his/her territories as stated by laws and policies.

### Urban Planners and Researchers

An important question that was addressed earlier by the researcher regarding the tools of investigation of the phenomenon was: how to combine spatial analysis and ethnography? Visualization was shown to be a key bridge. Ethnography-crafting sociologists and anthropologists, who tend to focus on people more than space, have noted the importance of visual research methods (Kim, 2015).

It is important for urban planners and researchers who are seeking to investigate/understand this phenomenon in another context to precisely choose the data collection methods and analysis techniques that would reveal the hidden dynamics and patterns behind the complex picture which is mostly experienced as a norm. And since this phenomenon is always addressed in the way it creates conflicts and negotiations, it is important to reveal the needs of the community practicing these informal practices through extensive participant and non-participant observations through video recordings and

photography, coding and counting of the various patterns, and most importantly extensive interviews and surveys with the different actors involved. Conducting a pilot study is extremely crucial due to the sensitivity and complexity of the phenomenon.

Most importantly, it is important in this framework to reveal what is beyond the conventional maps of spaces, what happens on the thin single line representing the sidewalk; which is always undermined and undervalued. This should be done by combining the information collected from the photographs, video recordings, in- depth interviews and structured and semi-structured interviews with the existing maps of the space. In other words, to establish interactive maps that would engage and attract the reader to develop a better understanding of an unexamined and neglected phenomenon.

It is not only important to go beyond the conventional single-lined maps and create interactive diagrams and maps that are simple and easy for the reader to understand, but also to combine this information with the narratives and the state regulations in **order to avoid imputing a researcher's own values and tastes** into the understanding of the phenomenon/ problem.

### 7.3 Challenges

Some challenges can be identified in this research. First, the choice of undertaking several data collection methods led the researcher to limit the number of case studies, in order to have a better chance to focus and develop an in-depth analysis of the phenomenon in a limited time frame.

Second, is the lack of sufficient amount of published studies and literature on the study of sidewalk spaces and the study of informal practices, not only in Egypt, but also internationally. This has led the researcher to spend more time trying to create a theoretical base for the understanding of the phenomenon before proceeding with the fieldwork and the analysis of the results.

Finally, due to the sensitivity of the problem/phenomenon, some of the interviewees were suspicious and uncomfortable, which led the researcher to pilot study the conduction of the various data collection methods to be able to conduct the interviews and surveys in a more casual and simple way that would somehow eliminate the fear of the users of informal practices.



## 7.4 Further Research

There are some points of investigation that needs to be further identified and studied. For example, it is crucial to understand how universal these patterns are in different cultures? Not only in different cities but also within the city. Do the users of informal practices occupy the sidewalk space in the same way? Since this research investigated the current spatial patterns of the informal practices in a very small part of the City, it is important to propose a further investigation of the phenomenon in other parts of the city too, since it takes place on many sidewalks inside the City.

Another important question that was briefly addressed in this research is: How these sidewalks can be designed and managed? This research showed that it **couldn't be done through just excluding** these informal practices, but to create an infrastructure for them to occur but in an organized way. Since the focus of **this research wasn't not to propose the kinds of alterations that needs to be done** in the laws and regulations or the design of the sidewalks, it is important that this point should be furtherly investigated in-depth.

Also, there needs to be a further in-**depth investigation on the influence of users'** perception on the spatial patterns of these practices. The focus of this research was mostly on the spatial dimension of these practices, however, it opens the door for researchers and urban planners to investigate the economic and political dimensions of these practices.

## References

- AbdelAziz, R. (2007) *Héliopolis : La métamorphose d'une cité- jardin en un quartier urbain*
- Abdelmonem, M. G. (2012). The Practice of Home in Old Cairo Towards Socio-Spatial Models of Sustainable Living. *Traditional Dwellings and Settlements Review*, vol 23, no. 2, pp.35-50.
- Ain Shams University Urban Planning & Design Department. (2015). *Heliopolis Transformation*. Cairo: Ain Shams Univeristy.
- Altman, Irwin, and Setha M. Low. (1992). *Place Attachment*. New York: Springer.
- Al-baghdadi, a., *Al-ifada wa al-I'tibar fi al-Ummour al mushada wa al-Hawadith al-m'aiyana bi Ard Misr* (Cairo: Al Migala al-Gadida, undated)
- Alhowaily, A., (2015), "Sustainable Urbanization in the Egyptian Desert, the Case Study Heliopolis – Investigating the Town Growth between 1905 and 1961 in Comparison to the New Urban Communities' Development within GCR." Unpublished M.Sc. dissertation. Department of Urban Development, Technical University of Berlin.
- AlSayyad, N. (1981) *Streets of Islamic Cairo: a Configuration of Urban Themes and Patterns*, Cambridge, Mass. Aga Khan Program for Islamic Architecture
- Amr, A. (2016, March 25). *6 Hidden Gems in Heliopolis*. Retrieved from The glocal: <http://www.theglocal.com/articles/511/6-hidden-gems-in-heliopolis>
- Appleyard, D., Gerson, M. S., & Lintell, M. (1981). *Livable streets*. Berkeley: University of California Press.
- Banerjee, T. (2001). The future of public space - Beyond invented streets and reinvented places. *Journal of the American Planning Association*, 67 (1), pp. 9-24.
- Bateson, Gregory, and Margaret Mead. 1942. *Balinese Character: A Photographic Analysis*. New York: New York Academy of Sciences
- Brill, M. (1989). Transformation, Nostalgia, and Illusion in Public Life and Public Place. In I. Altman (ed.), *Public Places and Spaces*. New York: Plenum Press.
- Brower, S. (1980). Territory in Urban Settings. In I. Altman, A. Rapoport and J. Wohlwill (eds.), *Human Behavior and Environment: Advances in Theory and Research* (Vol. 4 Environment and Culture). New York: Plenum
- Canter, D., (1977), "The Psychology of Place", Architectural Press, London.
- Carcopino, J. (1941). *Daily Life in Ancient Rome*. London: Routledge.
- Carmona, M., Heath, T., Oc, T. and Tiesdell, S. (2003). *Public Places - Urban Spaces: The Dimensions of Urban Design*. Oxford: Architectural Press.

- Carr, S., Francis, M., Rivlin, L., and Stone, A. (1992). *Public Space*. New York: Cambridge University Press.
- Chidister, M. (1989). Public places, private lives: Plazas and the broader public landscape. *Places*, 6 (1), 32-37.
- Church, D. (n.d.). Photos taken in Egypt 1952 - 1956. Cairo, Cairo, Egypt. Retrieved from <http://www.coug.net/egypt/Heliopolis.htm>
- De Certeau, M. 1993. "Walking in the City." In S. During, ed., *The Cultural Studies Reader*. London: Routledge.
- Dobrowolska, 2006. *Heliopolis, Rebirth of the City of the Sun*. First Edition ed. Cairo : AUC press.
- Duneier, Mitchell. 1999. *Sidewalk*. New York, NY: Farrar, Straus and Girou
- Edney, J.J. (1976 a) Human Territoriality: comment on functional properties *Environment and Behavior*
- Edney, J.J. (1976 b) The psychological role of property rights in human behavior *Environment and Planning A*
- ELgamal, S. (2009, February 09). *Thaqafat Alraseef Fee Masr.. Looaha Tagreedeya Mobhera [The Sidewalks Culture in Egypt..* Retrieved September 09, 2017, from Youm7:  
<http://www.youm7.com/story/2009/2/9/%D8%AB%D9%82%D8%A7%D9%81%D8%A9-%D8%A7%D9%84%D8%B1%D8%B5%D9%8A%D9%81-%D9%81%D9%89-%D9%85%D8%B5%D8%B1-%D9%84%D9%88%D8%AD%D8%A9-%D8%AA%D8%AC%D8%B1%D9%8A%D8%AF%D9%8A%D8%A9-%D9%85%D8%A8%D9%87%D9%85%D8%A9/69630>
- Epstein, L. (2013, August 20). *These Color Photos Of Cairo In 1910 Will Blow Your Mind*. Retrieved from Buzzfeed: [https://www.buzzfeed.com/leonoraepstein/these-color-photos-of-cairo-in-1910-will-blow-your-mind?utm\\_term=.xf60BwqbG#.ehaQJE7kW](https://www.buzzfeed.com/leonoraepstein/these-color-photos-of-cairo-in-1910-will-blow-your-mind?utm_term=.xf60BwqbG#.ehaQJE7kW)
- Franck, Karen, and Stevens, Quentin. 2007. "Tying Down Loose Space." In Karen Franck and Quentin Stevens, eds., *Loose Space* (1–34). London: Routledge.
- Gehl, J. (1987). *Life between buildings: using public space*. New York, Van Nostrand Reinhold.
- Gehl, J. (2006). CLOSE ENCOUNTERS WITH BUILDINGS. *URBAN DESIGN International*, 29 - 47.
- Gehl, J. (2010). *Cities for people*. Washington, DC: Island Press.
- Gehl, J. (2013). *How to study public life*. Washington, DC: Island Press.
- Gutman, R. (1978). The street generation. In S. Anderson (ed.), *On Streets*. Cambridge, MA: MIT Press.

- Hall, E.T. (1966). *The Hidden Dimension* (1969 edn). Garden City, NY: Doubleday.
- Hass-Klau, C., Crampton, G., Dowland, C. and Nold, I. (1999). *Streets as Living Space: Helping public spaces play their proper role*. London: ETP/Landor.
- Hillier, B., Penn, A., Hanson, J., Rajewski, T. and Xu, J. (1993) *Natural Movement: Or, Configuration and Attraction in Urban Pedestrian Movement*. Environment and Planning B, Vol. 20
- IFE, 2005. *Mémoires Héliopolitaines*. First Edition ed. Cairo: IFE, The French Embassy In Cairo.
- ILBERT (Robert), "Les lotis du Caire : La question de surélévations d'immeubles", in : *Maghreb-Machreq*, n<sup>o</sup> 91, Éd. La documentation française, 1981, pp.66-67
- Itelson, W.H., Rivlin, L.G. and Prohansky, H.M, (1970), "The use of behavioral maps in environmental psychology", *Journal of Environmental Psychology: Man and his Physical Setting*, 658-668.
- Jacobs, J. (1961), "The Death and Life of Great American Cities: The Failure of Modern Town Planning", Peregrine Books, London.
- Jacobs, A. (1993). *Great Streets*. Cambridge, MA: MIT Press.
- Jacobs, A. (2014). *Looking at Cities*. Boston: Harvard University Press. Retrieved 20 Jan. 2017, from <http://www.degruyter.com/view/product/251542>
- Kärrholm, M., 2005. Territorial Complexity in Public Spaces-A Study of Territorial Production at Three Squares in Lund. *Nordisk arkitekturforskning*, 18(1), pp.114-99.
- Kim, A. M., 2015. *Sidewalk city: Remapping public space in Ho Chi Minh City*. Chicago: The University
- Kostof, Spiro. 1992. *The City Assembled: The Elements of Urban Form through History*. New York: Brown.
- Lang, J. (1987). *Creating Architectural Theory: The role of the behavioral sciences in environmental design*. New York: Van Nostrand Reinhold Co.
- Lofland, L. (1973). *A World of Strangers: Order and action in urban public space*. New York: Basic Books.
- Lofland, L. (1998). *The Public Realm: Exploring the City's Quintessential Social Territory*. New York: Aldine De Gruyter.
- Loukaitou-Sideris, Anastasia, and Renia Ehrenfeucht (2009). *Sidewalks: Conflict and negotiation over public*
- Lynch, K. (1960). *The Image of the City*. Cambridge, MA: MIT Press.

- Mehta,V. (2013) *The street: a quintessential social public space*, ed., Routledge, Abingdon, Oxon ; New York, NY.
- Madanipour, A. (1996). *Design of Urban Space*. New York: Wiley.
- Mitchell, D. (2003). *The Right to the City: Social Justice and the Fight for Public Space*. New York: Guilford Press.
- Mongomery, J., (1998),“Making a city: Urbanity, Vitality and Urban Design”, *Journal of Urban Design*, 3, 93-116.
- Moudon, A. V. (1991). *Public streets for public use*. New York: Columbia University Press.
- Nagati,O., & Stryker, B. (2013). *Archiving the City in Flux: Cairo’s shifting Landscape Since the January 25<sup>th</sup> Revolution*. Cairo: CLUSTER
- Punter, J., (1991),“Participation in the Design of Urban Space”, *Landscape Design*, Issue 200, 24-27. Rapoport, A. (1990). *History and Precedent in Environmental Design*. New York: Plenum Press.
- Qin, Zin. (2016, June 14). *Snake charmers, feluccas on the Nile and bustling streets: Stunning century-old images show Cairo on the cusp of change*. Retrieved October 15, 2017, from Mailonline:  
[http://www.dailymail.co.uk/travel/travel\\_news/article-3638657/Snake-charmers-feluccas-Nile-bustling-streets-Stunning-century-old-images-Cairo-cusp-change-early-1900s.html](http://www.dailymail.co.uk/travel/travel_news/article-3638657/Snake-charmers-feluccas-Nile-bustling-streets-Stunning-century-old-images-Cairo-cusp-change-early-1900s.html)
- Rafaat, S. (1997, March 0). *HISTORY OF MOTORING IN EGYPT*. Retrieved from Egy.com:  
<http://www.egy.com/historica/97-03-02.php>
- Rapoport, A. (1987). Pedestrian street use: culture and perception. In A.V. Moudon (ed.), *Public Streets for Public Use*. New York: Columbia University Press.
- Ravazzoli, E., and Stefania Toso (2013). “Spatial Relations of Informal Practices in Cairo Streetscape” [http://www.rc21.org/conferences/berlin2013/RC21-Berlin-Papers-4/09\\_Ravazzoli\\_Toso.pdf](http://www.rc21.org/conferences/berlin2013/RC21-Berlin-Papers-4/09_Ravazzoli_Toso.pdf)
- Relph, E., (1976),“Place and Placelessness”, Pion, London.
- Rudofsky, B. (1969). *Streets for People*. New York: Doubleday.
- Rybczynski, W. (1993). The New Downtowns. *Atlantic Monthly*, 271 (5), 98-106.
- Scheflen, A.E.(1976) *Human Territories: How we behave in Space-Time*. Englewood Cliffs:NJ, Prentice Hall.
- Shimy, F. (2014, October 2). *A History of Heliopolis*. Retrieved October 11, 2017, from Egypt Today: <http://www.egypttoday.com/Article/9/2619/A-History-of-Heliopolis>

Southworth, M. and Ben-Joseph, E. (1996). *Streets and the Shaping of Towns and Cities*. New York: McGraw-Hill.

Usbpanasonic. (2013, November 13). *02\_Cairo-Exploring Dominos 1942*.

Retrieved from Pintrest:

<https://www.pinterest.de/pin/442197257134028013/>

Walzer, M. (1986). Pleasures and cost of urbanity. *Dissent*, 33, 470-484.

## Bibliography

Arefi, M., & Meyers, W.R. (2003). What is public about public space: The case of Visakhapatnam, India. *Cities*, 20(5), 331–339.

Bremer, J. (2013). "Informal Area Upgrading" *Learning from Cairo: Global Perspectives and Future Visions*, ed. Beth Stryker, Omar Nagati and Magda Mostafa, Cairo: Cluster and The American University in Cairo, pp.27-31.

Gehl, J. and Gemzøe, L. (2004) *Public Spaces – Public Life*. Copenhagen: The Danish Architectural Press.

Gehl Architects. 2007. *Public Life / Data / Sydney*. Copenhagen: Gehl Architects.

Harold M. Proshansky, Abbe K. Fabian, Robert Kaminoff, (1983) *Place-identity: Physical world socialization of the self*, *Journal of Environmental Psychology*, Volume 3, Issue 1, Pages 57-83, ISSN 0272-4944,

Keswani, K. and Suresh Bhagavatula (2014) *Territoriality in Urban Space: The Case of a Periodic Marketplace in Bangalore, India*.

Lambert, L. "Objects of Cairo: Excavating the City's Narratives" *Cairoobserver*. Cairoobserver, 1 April 2015. Web. [Accessed 20/06/2015]

Lefebvre, H. (1991). *The Production of Space*. London: Blackwell.

Lotus, 2010. *Favelas, Learning from*. [journal] issue 143. Lotus: Italy

Mahfouz, N. (1975) *Midaq Alley*, trans. Trevor Le Gassick, Cairo: The American University in Cairo Press.

Mahmoudi Farahani, L., & Beynon, D. (2015, January). Pavement cafes as the activity zone in the social life of neighbourhood centres. In *ASA2015: Living and learning: research for a better built environment: Proceedings of the 49th International conference of the Architectural Science*

Moursi, M., and David Puig (2015), *Sidewalk Salon: 1001 Street Chairs of Cairo*.

Ramadan, A. (2011) *Policies for the informal Sector in Egypt: a case study of Clothes Selling Street Vendors in Downtown Cairo*. Paper given at graduate seminar at the American University in Cairo. (Unpublished)

Sherman, L. (2013). "The Syncretic City" *Learning from Cairo: Global Perspectives and Future Visions*, ed. Beth Stryker, Omar Nagati and Magda Mostafa, Cairo: Cluster and The American University in Cairo, pp.21-26.

Sims, D. (2010). *Understanding Cairo: The Logic of a City Out of Control*, Cairo, Egypt; New York: The American University in Cairo Press.  
[http://dx.doi.org/10.1016/S0272-4944\(83\)80021-8](http://dx.doi.org/10.1016/S0272-4944(83)80021-8).  
(<http://www.sciencedirect.com/science/article/pii/S0272494483800218>)

Sims, D. (2013). "Understanding Cairo's Informal Development," *Learning from*



*Cairo: Global Perspectives and Future Visions*, ed. Beth Stryker, Omar Nagati and Magda Mostafa, Cairo: Cluster and The American University in Cairo, pp.38-41.

Shehayeb, D. (2011). *"Urban Regeneration Project for Historic Cairo, Sector Study: Community- Oriented Activity Patterns"*

Shehayeb, D. (2013). "Research and Intervention in Informal Areas" *Learning from Cairo: Global Perspectives and Future Visions*, ed. Beth Stryker, Omar Nagati and Magda Mostafa, Cairo: Cluster and The American University in Cairo, pp.125-130.

Whyte, William.H, (1980), "The Social Life of Small Urban Spaces", The Conservation Foundation, Washington, D.C

## Appendices

### **Appendix A: Structured Open-ended interviews with users of informal practices**

#### General Questions:

- What is your name?
- How old are you?
- For how long have you been staying here?
- Why does this activity take place?
- Who are the actors involved?
- Why do you choose to locate yourself here on the sidewalk?
- For how long do you stay here throughout the day?
- When does this activity take place?
- How frequent do you stay here daily/monthly/yearly?
- How do you define your territory?
- How many workers are involved in this activity?
- What is the estimated number of your clients daily?
- Are you subjected to any rejection from the residents or government? How?
- Where do you store your furniture/tools?
- Who are your clients?

#### To vendors:

- From where do you get your supplies?
- How do you transport your products?
- How much do you pay for transportation?

#### To salesmen/shop owners displaying their products on the sidewalk:

- When you are closing the shop, do you move the machines/products inside the shop?
- How do you secure your products against stealing?
- Did you assemble different floor tiles in front of your shop? If yes, why?

#### To *Qahwa* owners:

- Do you serve other shop owners/ employees/ workers in the surrounding area? (Other than your clients)

#### To users of separate chairs:

- To whom do these chairs and tables belong?
- Are the furniture shared with other users?
- Are you served by nearby coffee shops or self-served?
- Do you prefer sitting outdoors on the sidewalk or indoors?

## Appendix B: Structured open ended interviews conducted with residents

- What is your name?
- How old are you?
- Where do you live?
- How long have you been living here?
- How often do you walk on the sidewalks of your street?
- What is the purpose of your walk?
- From where do you get your basic daily supplies?
- How has the street/sidewalks changed over time?
- What frustrates you about the sidewalks in your street?
- Are you and your neighbors responsible for the maintenance of the sidewalk area in front of your building?
- Is the entrance to your building easily accessed?
- What kind of practices takes place on the sidewalks of your street?
- How often do they take place?
- Which streets do you visit more: Haroun Al-Rashid or Alexandria street? Why?
- How frequent do you visit the other street?
- What would you like to change/adjust in your sidewalk?

## **Appendix C: In-depth interviews with officials in the municipality**

- What is your name?
- How long have you been in this position?
- What is the role of the municipality regarding the sidewalk use?
- Do the sidewalk-use regulations differ from one neighborhood to another?
- What are the regulations regarding the sidewalk use in Cairo?
- Have these rules changed over time? If yes, how?
- What kinds of behaviors and practices are legitimate to take place on the sidewalk?
- Are the informal practices categorized according to their level of impact on the surrounding? If yes, how?
- How do you deal with users who violate the laws and regulations regarding the sidewalk use?
- How regularly are the municipality visits to both streets?
- How does the situation differ from Haroun Al-Rashid to Alexandria Street?
- What is the reason behind the misuse of the sidewalk?
- Are there any licensed informal practices on the sidewalks?

- Are there any informal practices that are less subjected to rejection?
- What are your suggestions regarding this phenomenon?

#### **Appendix D: Online Survey directed to visitors of ‘Midan Al-Gamea’, published on Facebook**

- How old are you?
- Where do you live?
- How frequent do you visit Midan Al-Gamea?
- What is the purpose of your visits/walk?
- How familiar are you with the area?
- What first comes to your mind when describing your walk on the sidewalks of Haroun AL-Rashid/ Midan Al-Gamea?
- How would you describe your walk on the sidewalks?
- During your walk, do you get obstructed with any kind of informal practices on the sidewalk? (Example: vendors, displayed products, furniture, workshops, etc)
- Do you have to pass through the street during your walk on the sidewalk?
- If the sidewalks of Haroun Al-Rashid/ Midan Al-Gamea were to be completely clear for pedestrian circulation only, what kinds of practices would you like to maintain on the sidewalk?



## الملخص

الطبع غير للرسمي في القاهرة هو في معظم الأحيان يعالج إغلي س ياق المبتوطنات غير الرسمية أو أحياناً في الاقتصاد غير الرسمي / الباعة الفجولين. ومع ذلك، نادراً ما يتم التعامل مع القطاع غير للرسمي بطريقة تؤثر على الحياة اليومية للناس من لالال أشكال من الممارسات غير الرسمية على مساحات الرصيف من الأحياء الرسمية و ير الرسمية. والممارسات غير الرسمية اليومية في معظم الحالات محصورة في الحيز العام للألافة، وتتدخل في مسارات المشاة وأنشطة الأراضيات ومحال التجارية في شكل اعتمادات إقليمية. ويمكن أن يتعد دور الممارسات غير الرسمية اليومية على أراضى القاهرة إلى ما هو أبعد من توليد مساحات من النزاعات والمفاوضات، حيث يمكن أن يؤيد تحقيقها / واسقتها إلى إجراءات تخطيط ممكنة تتناسب مع احتياجات المجتمع

والهدف الرئيسي من هذا البحث هو توفير تحقيق شامل وتعمق من المظاهر المكانية للممارسات غير الرسمية داخل الكون الصغير من الرصيف من أجل تطوير فهم أفضل لكيفية إدارة الأرصفة وتصميمها في أكثر وسيلة فعالة تتناسب مع احتياجات المجتمع. والهدف من الباحث هو اقتراح أدوات جديدة وشاملة لتحقيق ووضع قاعدة لتتراجع إجراءات التخطيط الممكنة. يهدف الفللال الثاني والثالث على التوالي إلى مراجعة الملفات ذات الصلة بهدف وضع سياق ظاهرة الممارسات غير الرسمية على أرصفة القاهرة، فضلاً عن فهم وتتبع تطور الظاهرة في القاهرة. ويعرض الفصلان 4 و 5 نطاقاً أكثر تركيزاً على أساليب جمع البيانات والنتائج الأولية من العمل الميداني على واسات الحالة المختارة. وقد تم تحليل دراسة الحالة على شارعين في مصر اشارع: عديداً هارون الإلايد والإلاالإ الإسكندرية. يتضمن الفللال الأخير نتائج تحليل وفهم العوامل والمبادئ والدوافع والمفاهيم تجاه الظاهرة، ولها البحث مع التوصية بإعادة ضبط السياسات المتعلقة باستخدام الرصيف واستخدام أدوات شاملة وتفاعلية للتحقيقات في واسات مماثلة

كلمة مفتاحية: ممارسات عشوائية؛ الرصيف؛ عشوائية؛ غير رسمية؛ أماكن عامة؛ الأحياء الرسمية





## إقرار

هذه لرسالة مقدمة في جامعة عين شمس وجامعة شنتوت جارت للحصول على درجة العمران المتكامل  
ولتصميم المستدام . إن العمل الذي تخو به هذه لرسالة قفتم إنجازه بمعرفة الباحث سنة ... هذا هي قر  
الباحث أن العمل المقدم هو خلاصا بحثه الشخصي وله قد تدببع الإس لوب العلمي للسليم في الإلارة للمواد  
الماخوذة من المراجع العلمية كل في مكل في مختلف أجزاء لرسالة

وهذا إقرار مني بذلك

بالتوقيع:

س: ثحابلاس بيل فهمي

للتاريخ: ٢٠١٨/٠١/٢٤



# إعادة النظر في الحياه على أرصفة المدينة: رصد أنماط الممارسات العشوائية على أرصفة مدينة القاهرة

دراسات الحالة في شارع هارون الرشيد وشارع الأسفلت نديه، تيوبوليس

رسالة مقدمة للحصول على درجة الماجستير لابي لالالا التكامل ولتصميم للمس تدام

إعداد  
سلس بيل فهمي

إشراف

أ.م.د. ماجد مصطفى  
أستاذ مساعد في العمارة الجامعة  
الأمريكية بالقاهرة

أ.د. يوهان إمين  
أستاذ التصميم والتخطيط  
العمارة في جامعة توت تجارت

أ.د. محمد صالحين  
أستاذ التخطيط والتصميم العمراني  
التكامل جامعة عين شمس

لجنة الحكم  
للتوقيع:

تاريخ المناقشة:

أ.د. ....  
المصحن الخارجي  
أستاذ  
جامعة

اجيزت الرسالتاريخ:

أ.د. ....  
أستاذ  
جامعة

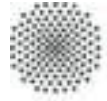
موافقة مجلس الجامعة.....\.....\.....

جامعة عين شمس



أ.د. ....  
أستاذ  
جامعة

جامعة توت تجارت



تتم الاجازة  
موافقة مجلس الكلية.....\.....\.....

٢٠١٨/٠١/٢٤





Ain Shams University  
Cairo



University of Stuttgart  
Germany

# إعادة النظر في الحياه على أرصفة المدينة: رصد أنماط الممارسات العشوائية على أرصفة مدينة القاهرة دراسات الحالة في شارع هارون الرشيد وشارع الأسكندريه، تيوبوليس

رسالة مقدمة للحصول على درجة الماجستير في الآراء والتكامل والتصميم المستدام

إعداد

سلسبيل فهمي

إشراف

أ.م.د. ماجدة مطفي  
أستاذ مساعد في العمارة الجامعة  
الأمريكية بالقاهرة

أ.د. يوهان ليسن  
أستاذ التصميم والتخطيط  
الغمراني جامعة فكت جارت

أ.د. محمد صالحين  
أستاذ التخطيط والتصميم العمراني  
التكامل جامعة عين شمس

يناير ٢٠١٨