





ISSN (Print: 2537-0154, online: 2537-0162)

International Journal on:

# The Academic Research Community Publication

**DOI:** 10.21625/archive.v2i3.362

# Towards Urban Spaces of Quality: Through the Existing Urban Legislations in Egypt

# Haitham El Sharnouby<sup>1</sup>

<sup>1</sup>Higher Institute for Engineering and Technology in Behera, Egypt.

#### Abstract

Egyptian urban spaces suffer from a chaos that is the result of crowded and disordered pedestrian sidewalks, streets and shop signage. This chaos creates a negative effect on, both, the image of the city and the quality of life within these urban spaces. Many legislations and regulations in Egypt attempted to deal with these issues. Similarly, the Egyptian government established many organizations and authorities in order to deal with these issues with little success. The National Organization of Urban Harmony (NOUH) is one of those organizations established by the government to take the responsibility of dealing with pedestrian sidewalk and shops' signage while the municipality deals with road occupations. These organizations should perform their responsibilities through the Egyptian legislations. The research at hand aims to find a solution to that particular problem which has influenced the quality of the street and its reflection to the quality of life as result. In order to find a solution, the research attempts to find a mechanism to boost the role of shop signage as an element of urban spaces in order to emphasize street quality. Thus, the research well be divided into four parts: part one reviews the quality of urban spaces and the meaning of its terms while part two reviews the concept of the quality of life and the relation between the quality of life and urban spaces. Part three demonstrates the urban quality of life through tangible and intangible approaches. Finally, part four reviews the Egyptian legislations that deal with research issues and attempts to find the difficulties that faced when enforcing laws. Finally, the research conclusion illustrates the most important issues in the research and their proposed solutions.

© 2019 The Authors. Published by IEREK press. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/).

# Keywords

Urban; Municipality; Advertisements; Sidewalks; Quality of life; Urban space; Urban legislations; Road's occupations; Sign boards

#### 1. Introduction

Urban spaces have more than one type, paths and streets are the most type that people daily used. Thus, the higher quality of the urban space, the higher influence in the people's comfort in that urban space. The quality of urban spaces has more than one definition, and it depends on more than one element. The most important element that influence the quality of urban space is the path that link between urban spaces which represented by the pedestrian sidewalk, streets, roads, streets, and walk ways which represent the main elements in the city's visual components. The importance of the path is based on its influence in different aspects such as culture, perception, cognition, behavioral issues and made environment. In all over the world, the local government or municipalities are the states party that obligated to control the sidewalks and shops' signage, but in Egypt the local government actually

has no control on these elements. Egyptian legislations in terms of road's occupations and urban harmony discussed the quality of urban spaces and the people's comfort in implicit manner. *NOUH* obligated to issue several heuristic guides about specific urban element to cover all the urban activities. Those specific urban elements are including both "*Signboards*", and "*sidewalks*". In another side, the road's occupations are included in a particular law in order to prevent any violations may make negative influence in the street as an urban space. The main problem that makes the Egyptian's urban spaces suffer that chaos is; that there are many factors prevent enforcement of legislations regarding road's occupations, sidewalks, and shops' signage, which make a pore urban quality of life inside the streets for pedestrians and car parking.

#### 1.1. The Research Problem

The problems of the research can be concluded in the following points:

- The infringement on the inviolable of sidewalks in order to gain extra showcase spaces, as in Figure 1.
- The infringement on the inviolable area of the street to prevent car parking, as in Figure 2.
- Sidewalks distortions in terms of widths, paving, regularity, and levels, as in Figure 2.
- Disunification of shops' signage in terms of pattern, form and its contents as in Figure 1.



Figure 1. Infringement of shops on the street and sidewalk (The researcher, 2017)



Figure 2. Infringement on the street to prevent car parking (The researcher, 2017)

# 1.2. The Research Aims

The research aims to find a mechanism in legislative manner to facilitate the connection between the urban space participants and the competent municipality to enforce the regarding laws to achieve the quality of street as urban space. This mechanism depending on:

- Involving the shops' owners as responsible of infringement on the inviolable of the street and sidewalk.
- Involving the real estates occupants as responsible of infringement on the inviolable area of the street.
- Exploring the legislative reasons of disunifications of shops' signage in the Egyptian streets.
- Exploring the legislative reasons of sidewalks distortions.

# 1.3. The Research Methodology and Workflow

The research depends on the descriptive approach in reviewing the literature of urban spaces and quality of life in order to define a baseline to be compared with the Egyptian existing reality, while the inductive approach used in reviewing the Egyptian legislations to explore the reasons of the last two points in the research problems. The research will follow the process that illustrated in Figure 3, in order to achieve its aims

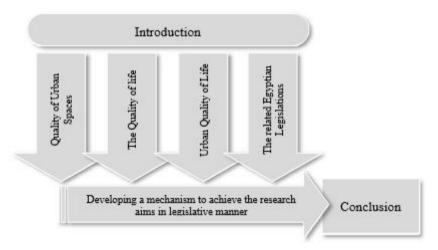


Figure 3. The research outline

## 1.4. The Research Limitations

This research and most researches that were performed after 25 January 2011 where there were restrictions for security precautions regarding taking a live photograph. Thus, some photos may not reflect exactly the problem for the mentioned reason.

# 2. The Quality of Urban Spaces

Presence of people in urban spaces, their activities and applications seem more important than good design of physical elements as in Figure 4, because urban environments are influencing beyond a collection of buildings which are separated by streets, squares or parks. Undoubtedly, urban spaces belong to and are around people and they reflect people's activities. Therefore, the better quality of urban space the better efficiency, variety, and quality of citizenship (Tibbalds, 1992). Cullen stated that townscape is "the art of relationship" in urban space (Cullen, 1975), this relationship is between three factors providing city's sensational experience: optics, place and content. Among these factors, optics is the most important one and declares us a dynamic experience of walking through urban space. Cullen's also demonstrates how movement can be read as a visual sequence and emphasis that our perceptual sense is a function of the visual and experimental qualities of the urban space we are moving through. A mutual relationship between human and urban space was considered and discussed several times in terms of human and environment. Barker suggested that if there is compromisation between human acts and physical and social environment, places will come to conformity. Generally, presenting a comprehensive classification of theories

expressed in appurtenance studies in urban space can help us to identify its qualitative dimensions (Barker, 1968). This led us to look for, what is the most suitable definition of the quality of urban spaces, for the research's point. In fact there are various definitions for the quality of urban spaces and environment, the most suitable definitions for this research's point when Lansing and Marans stated that "an environment of high quality conveys a sense of well being and satisfaction to its population through characteristics that may be physical, social or symbolic" (Lansing & Marans, 1969). In in other words, Porteous defined it as "a complex issue involving subjective perceptions, attitudes and values which vary among groups and individuals" (Porteous, 1971). While Pacione defined it as contention is that "quality is not an attribute inherent in the environment but is a behavior- related function of the interaction of environmental characteristics and person characteristics. . . . We must consider both the city on the ground and the city in the mind" (Pacione, 1993). Hence, we can conclude that the term "quality of urban space" should be divided into two terms the first term is "Quality" and the second term is "Urban spaces" which discussed in this research in terms of paths.

# 2.1. Quality

Quality is one of those words which are used unthinkingly by everybody, but which stubbornly evade definition. In general usage and in publicity circles, the word "Quality" is frequently used to designate the attractiveness or the excellence of the product (Osman, 2004). Also, 8402-1986 standard defines the quality as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs" (Business Dictionary, 2017).

#### 2.2. Urban Spaces

A city is a spiritual and physical system which responds to its residents' demands, activities and behaviors. Social needs and human special behavioral patterns are the basics of spatially human presence in the city. Therefore, they shape or may modify the urban spaces (Razavizadeh, 2015). This means that urban spaces are strongly related to the way people work and live in the cities (Lang, 1994). Since the industrial revolution era, people's approaches to production and lifestyles have further exceeded all aspects of the traditional urban space; thus creating the so called "lost space" (Trancik, 1986). These resulted because the urban space has gradually become occupied by motor traffic and urban life has been relegated to the sides of the roads (Expert, 2011). Since the 1960s, researchers have paid more attention to optimizing urban spaces and promoting outdoor activities (Sun, 2013), in order to improve the influence of the most important urban factors on people's emotions toward their sense of quality of urban space. These important factors may concluded as building façade details, building functions, ground floor usage and what individuals actually see (Li, 2016).

#### 2.3. Paths

Lynch classified the contents of the city images into five elements: Paths, Edges, Districts, Nodes and Landmarks. Streets always expressed as paths, and undoubtedly paths are the most important connective element in the city. They are the channels along which the observer occasionally or potentially moves. People observe the city during moving through it, and the other environmental elements are arranged and related along these paths. The observer form an image in his mind sometimes due to a certain activity concentrated on such path, this applies not only to activities but also to certain features and spatial quality. So Figure 5 illustrates one of the research problems which reflect the suffering which people faced in the streets during walking, shopping, parking, and their public ownership of the streets. Then the free of physical obstacles in paths and streets may create a comfort relationship between human and urban space and make it approximated to be qualitative urban space.



Figure 4. Paris, Les Berges. Activities seem more important than physical elements (MacKenzie, 2015)



Figure 5. Obstacles in streets and sidewalks create a hostile sense to whom made such obstacles. (The researcher, 2017)

# 3. The Quality of Life

Quality of life is a concept which has generated a great deal of interest in recent few years. It is not only arise in the current and previous century, but it dates back to philosophers like Aristotle the philosopher (384–322 BC) who wrote about wellbeing of life and how public policy can provide it. Much later, in 1889, Seth was used the term quality of life in a statement by: "we must not regard the mere quantity, but also the quality of life which forms the moral end" (Marshall & Banister, 2007). Many studies has been focused the quality of life but till now there is no consensus has been reached to how it should be defined (Serag, 2013). It is a complex construct and multidimensional that requires multiple approaches from different theoretical visions. There were many attempts to find a definition to quality of life and find what constitutes it in different disciplines. Quality of life have been noted in the literature by more than hundred definitions. Quality of life is "the satisfaction in your life that comes from having good health, comfort, good relationship etc., rather than from money"... It is "the personal satisfaction (or dissatisfaction) with the cultural or intellectual conditions under which he lives" (The Free Dictionary, 2017). It is also refers to the day living enhanced by healthy food, clean air and water, enjoyment of parks, open spaces and water elements, conservation of wildlife and natural resources, security from crime, and protection from radiation and toxic substances. There are enough elements of quality of life held in common by members of a society for the concept of quality of life to be meaningful. Otherwise, the quality of life concept in the community is usually used to explore services and factors of the community, and resources that the people are observed as factors influencing their life quality or helping them in coping with each other (Sun, 2005). Myer stated that a community quality of life is built of the shared characteristics participants experience in places For example, traffic, water and air quality, or recreational opportunities, and the subjective evaluations participants make of these conditions. When the quality of life related to urban spaces it may be a sensory experiment inside the urban space, and by analyzing this experiment in urban space we find that it is possible to identify two approaches in which quality of life is affected: the physical approach and the emotional approach. The physical approach is maybe the simpler of the two to consider because it deals with tangible and material aspects of the built environment; dimensions with substance that are mutable and can be touched, altered, and shaped. On the other hand the emotional approach deals with less tangible, more ethereal aspects of urban spaces that nonetheless demand attention due to the impact they have on the physical approach. It deals with people and their relationships to each other, their rapport with places, their senses of community, and the differences experienced by different people at different times. Ultimately the two are entwined and it is with this interconnection between the emotional and physical approaches that urban design should work to create urban spaces in order to contribute to a positive quality of life and wellbeing.

# 4. Urban Quality of Life

Quality of urban spaces and quality of life are always the main two targets to be achieved by the designers, which mean that they should not achieve sparely. Mixing these two achievements in one expression may make it easy to be achieved together and generate which most called term "Urban Quality of Life". Urban quality of life is not a simple term and has no clear definition. So, till now there is no agreement for its definition but it has complex visions which might be defined by various disciplines. The term urban quality of life is not used to describe some physical features but to describe all the forked relationships that exist between those physical features. Thus, the definition of urban quality of life is complicated rather than linear. The need to improve the quality of life in a specific place or for a specific person or group is an important to be taken in consideration by planners. Improving the quality of life in urban spaces is no longer a simple matter, but the human satisfaction with different urban characteristics like transportation, recreational opportunities, quality of public areas, population and building densities, land use patterns, and ease of access for all to basic services, goods and public amenities. As well as social characteristics like security, safety, public health, social integration, education, increasing accessibility for disabled persons, promoting equality and respecting diversity of cultural identities, conservation of historic, religious and culturally significant buildings, or districts, emphasis mixed use of housing and services at the local level in order to perform the diversity of needs and expectations. These are in addition to environmental characteristics like respecting local landscapes and treating the local environment.

# 4.1. Activities in Urban Spaces

The relation between people and their city influences the fundamental matters of life like a strong link. In closely view to the city, a neighborhood center and its facilities specify the way of thinking of its residents to improve their environment or even motivate people to move and do something. Urban space is a combination of local attributes and human presence which is a part of features related to human perceptual and behavioral aspects. By behaviors and experiences, urban spaces are developing and evolving at moment and its vitality and dynamic space are influences the life inside it. In recent years, discussions regarding environmental design has not been possible without paying attention to human participation (Razavizadeh, 2015). Environmental and urban design researchers considered that urban space is the best place to evaluate all of social, cultural, artistic and perceptual aspects along time, if one is identify some of the attributes which have helped implementation in survival of pedestrian areas (Tiwari, 2013). Urban spaces are the best context to emphasis behavioral human interactions. These spaces include all public spaces where people have visual and physical access (Madanipour, 1992). In this regard, we can observe the pedestrian activities and human's behavior in public spaces in order to enhance their quality. There has been a great emphasis on the role and importance of public spaces in different aspects of comfort and health issues in the

literature of design and planning. There are certain reasons of human presence in urban space, these reasons can be classified into three part as in Figure 6 and according to Gehl:

- Necessary activities (e.g. going to school or work, shopping, waiting for a bus) that participants have no choice.
- Optional activities take place, if time and place allow, and weather and setting invite them (e.g. taking a walking to get a fresh air, stopping for a coffee in a street, people watching)
- Social activities depend on the presence of others in public space(e.g.communal activities, passive contacts such as simply seeing and hearing other people)



Figure 6. Activities in urban spaces (Gail, 1987. Adapted by the researcher)



Figure 7. What makes a great place (PPS, 2009)

# 4.2. Sensation in Urban Spaces

PPS identifies four key attributes of urban public open spaces based on PPS's years of experience in working with communities, the observations and research of well-known placemakers and recent conversations with folks. These

key attributes focus on ways to attract people to a street as an urban public space and to tap into its community-building potential. These four attributes also closely parallel to PPS's "What Makes a Great Place" diagram as in Figure 7 as follow (Soltanian & Mohammadi, 2015):

- Sociability: One of the most important attributes of urban spaces is to create opportunities needed for social
  interactions. Interaction with other people of the society leads to creating a stronger relationship with the
  place and society.
- Activity and usage: the most important factors in urban spaces dynamics and their activity in various hours and seasons are social events, different activities and usages inside the urban space and their potential to attract individuals and different groups
- Access and relation: relation is related to the quality of circulation, space connections and access along
  with space visibility and accessibility to the space as physical and visual access that affects security and
  performance of the space.
- Image and comfort: image is related to the quality of space physical organization and mental comfort of
  the place. Sustainability, distinction and visual pleasure of the space are effective in attracting people to a
  specific place and their mental comfort.

The most important approaches of those attributes which reflect the aims of the research were "the relations which related to the quality of circulation, and image, and related to the quality of mental comfort".

# 5. Egyptian Legislations Regarding Urban Quality of Life

When we talk about Egyptian law regarding urban quality of life, we can conclude from the above literature that we should talk about roads' occupations, shops' signage, and pedestrian sidewalks. Egyptian regulations regarding roads' occupations are working through law was issued at 1956 and still working till now. This law called "Law no. 140 of year 1956 for road's occupations". The executive rule of the road's occupations law in its article (1) is dividing the public roads into two main types as illustrated.

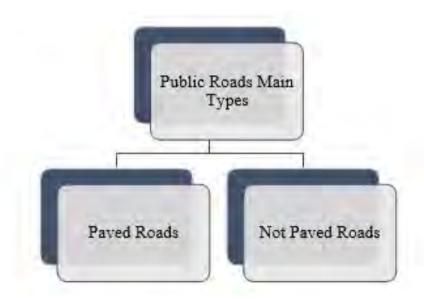


Figure 8. The Public Roads' Main two types (the researcher, 2017)

The first type is which paved by asphalt, concrete, stones, or any other tiles, this type considered if it has sidewalk or not, while the second type is that not paved. The executive rule of the road's occupations law in its article (5) also classifies the ground floor usage and activities which may occupy the roads by violations as; garages, workshops,

repairing of carpets and clothes, and stores of grocery, slaughter and any food shops. All that mentioned activities are not allowed to obtain any road occupation permissions, this in addition to the commercial refrigerators and balance scales are not allowed to obtain any road occupation permissions as well. Also article (6) of the same rule stated that it is not allowed to give permission for occupations which laid at distance less than ten meters from entrances of pedestrians pass tunnel (Ministry of Municipal and Rural Affairs, 1956). In another point of view the Egyptian building law stated in part two of the law "Urban Harmony" that NOUH should establish heuristic guides for twelve urban elements, these guides are sorted in Table 1. Five heuristic guides of them was issued till now, these five heuristic guides are; Heritage sites and buildings, Advertisements and signboards, City centers, Open spaces and parks, and Quality management. Heuristic guide of roads and sidewalks still not issued as shown in Table 1.

Status	Issued						
	1		2	3	4	5	
	Heritage sites		Advertisements and	City centers	Open spaces	Quality	
	and buildings		signboards		and parks	management	
Heuristic	Not issued so far						
Guide							
	6	7	8	9	10	11	12
	Quality	Roads	Environmental	Cities'	The village	Nature	External
	man-	and	fundamentals	entrances		re-	light-
	age-	side-				serves	ing
	ment	walks					

Table 1. The twelve heuristic guides that should be issued by NOUH.

So, the sidewalks in the most areas of the city are in critical situation in terms of its width, paving, regularity of level, and height of its curbstone Figure 2. The heuristic guide of "Advertisements and signboards" is organizing the shops' signage in one small article which stated that "It's allowed to commercial and administrative activities shops in ground floor of buildings, putting a signage for their activities and utilizations, and the competent local authorities should arrange with urban harmony responsible party in the province in order to unify the form and pattern of the signage when proceeding the building permissions" (NOUH., 2010). This heuristic guide issued while there is another law still working till now, called "Law no. 66 of year 1956, for regulating the advertisements". This law and its executive rule define the criteria of shops' signage in terms of its height, dimensions related to the width of shop-front, and emerging of the signage, but this law and the competent heuristic guide have not any control to the signage contents.

#### 5.1. Difficulties Facing Prevention of Infringement on Roads and Sidewalks

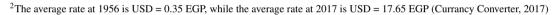
Law of roads' occupations is not like the most of the Egyptian laws because it has not a separate part for penalties, but it has only one penalty for all violations instead. This penalty is committing the violators to pay 100 EGP up to 300 EGP. as forfeit (Council of Ministers, 1/4/1956). This penalty article was decreed at 1980 when the exchange rate of USD was less than one Egyptian pound as in Figure 9, which means that this penalty is not suitable for applying now at 2017.

In particular view the mentioned penalty of road occupation is not linked to a period of time which the violation occupies the road, in addition, the law stated that the removal of the violations should not be done unless issuing a related adjudication which is mean that there is a delay of time in order to implement the removal of road's occupations. This is obviously means that the penalty is not deterrent enough to prevent the violations, which is reflecting a bad image of city in terms of roads, urban spaces, pedestrian pass tunnels, ... etc. Figure 10 illustrates an extreme violation in the entrance of pedestrian pass tunnel while this occupation according to the law should be laid at least ten meters from that entrance. One of the most important reasons that made the spread of road's occupations phenomenon, is the difficulty of involving urban spaces' participants to prevent this phenomenon. It's

possible to prevent violations of roads' occupations by facilitating the way which the participants can connect the municipality and complaint for these violations. One of the best way to facilitate the connection between urban spaces' participants and municipalities is that each municipality specify a hot telephone line and make the shops owners committed to demonstrate this hot number in the shop's signage in obvious manner. This way cannot be applicable now until involving the signage law and the competent heuristic guide in the signage contents.

#### 5.2. Difficulties Facing Unification of Shops' Signage and Sidewalks Harmony

As illustrated in Table 1; one of the un-issued heuristic guides till now is the heuristic guide of roads and sidewalks, in parallel there is no any obvious working legislations in Egypt regulate the sidewalks especially in terms of widths, paving, regularity, and levels. This directly reflected to the physical and mental comfort of the urban spaces participants as in Figure 2 and Figure 11. Regarding shop-front signage; as mentioned before there are two regulations control this article, the first one is the heuristic guide of advertisements and signboards which mentioned this article in one short paragraph with vague criteria, Subsequently part two of building law regarding urban harmony did not assign any penalties when violating that intangible criteria, as well as the signage content did not one of that criteria. The second one is law no. 66 of year 1956 for regulating the advertisements, although; this law defines more accurate criteria than the heuristic guide for shops' signage in terms of its height, dimensions related to the width of shop-front, and emerging of the signage but penalties when violating these criteria does not reasonable to apply now a day at 2017. This law defines a penalty when violating the specific criteria by one EGP and does not exceed ten EGP (Council of Ministers, 26/2/1956). The penalty was established at the year that the law issued when the exchange rate was one USD equal 0.35 EGP<sup>2</sup>.



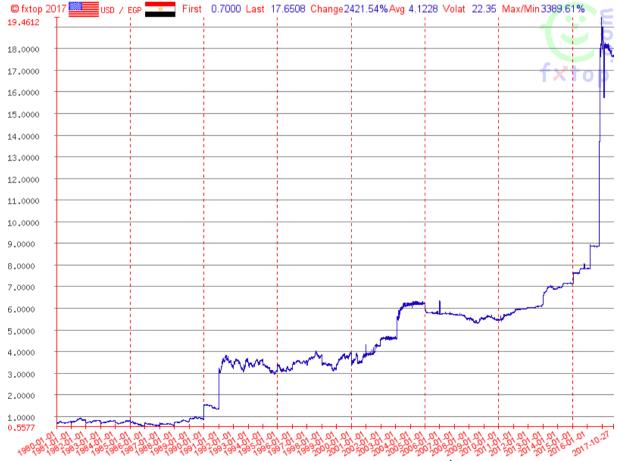


Figure 9. Historical exchange rates graph of USD vs. EGP<sup>1</sup>

Until now there are not any legislations deal with signage on the entrances of residential buildings, although the Egyptian building law in part four dealt with the real estate wealth and how to establish the occupants' federations in these real estates, but those federations did not get committed by the law to use any signage on the building entrance to promote themselves in terms of address, name, or even hot telephone line to connect with municipality if they made any violations. As well as this, the heuristic guide of advertisements and signboards did not mention anything about signage on buildings entrances. Hence, municipality cannot control any infringements to the inviolable area of sidewalk and street in front of the building entrance as in Figure 2. So, by committing the occupants' federations to use signage on the building entrance and control its contents, the municipalities may get more control of infringements in front of the building's entrance on the inviolable area of sidewalk and street.

#### 6. Conclusions

The research parts illustrated the quality of urban spaces and its relation with the quality of life, then it attempted to link these articles with the Egyptian legislations regarding roads, sidewalks, and shops' signage as key points may influence the upgrade the reality of the Egyptian streets. Hence, the research achieved the following conclusions;

- Paths are the most important connective element in the city
- Quality of urban spaces should consider both the city on the ground and the city in the mind
- The interconnection between physical and emotional approaches in urban spaces should emphasize the quality of life.
- Urban quality of life is the human satisfaction with different urban attributes which include activities in urban spaces and sensation in urban spaces.
- Egyptian legislations that influence the urban quality of life are the law of public road's occupations, law of public roads, and part two and four of building law.
- The applied penalties to the violations of road's occupations and signage standards are not deterrent enough to prevent the violations, because they are decreed 61 years ago, as well as the forfeit is not suitable for now a day.



Figure 10. Extreme violation in the entrance of pedestrian pass tunnel (The researcher, 2017)



Figure 11. Sidewalks distortions in terms of widths, paving, regularity, and levels (The researcher, 2017)

- The legislations of shops' signage have no control to the signage's content. And the legislations of the real
  estate wealth did not obligate the occupants' federations to put a signage on the real estate's gate.
- There is not any commitments or legislations to the shops' owners and real estate's occupants' federations to include a hot telephone line in obvious font, color, and location in their signage, in order to facilitate the connection between the urban space participants and the competent municipality.
- In order to achieve the research aims and solve its problems, the penalties that applied to the violations of roads' occupations and signage standards should be modified in the regarding laws to be contemporary and related to the existing exchange rate in order to be deterrent enough to prevent those violations.
- An article should be added to the laws regarding signage, to obligate the shops' owners and real estates' occupants' federations to include a hot telephone line in obvious font, color, and location in their signage, in order to facilitate the connection between the urban space participants and the competent municipality, and assign a deterrent penalty when violate that.
- Speed up issuing the heuristic guide of roads and sidewalks and establish a deterrent penalty for any violations to that guide provisions.

# 7. References

- 1. Banister, D., & Marshall, S. (Eds.). (2007). Land Use and Transport. doi:10.1108/9780080549910
- 2. Barker, R. G. (1968). *Ecological Psychology Concepts and Methods for Studying the Environment of Human Behavior.* Palo Alto, CA: Stanford University Press.
- 3. Council of Ministers. Public road's occupations Law 140. Egyptian chronicles, vol. 26 bis. ARE. 1/4/1956.
- 4. Council of Ministers. *Regulating the advertisements Law 66. Egyptian chronicles*, vol. 16 bis. ARE. 26/2/1956.
- 5. Cullen, G. (1975) Townscape. Van Nostrand Reinhold Company, New York.
- 6. Egypt, Ministry of Municipal and Rural Affairs. (1956). *Executive rule of public road's occupations Law* 140. (Vol. 32, Egyptian chronicles.). Cairo, Egypt.
- Expert, P., Evans, T. S., Blondel, V. D., & Lambiotte, R. (2011). Uncovering space-independent communities in spatial networks. *Proceedings of the National Academy of Sciences*, 108(19), 7663-7668. doi:10.1073/pnas.1018962108
- 8. Gehl, J., & Koch, J. (2011). Life between buildings: Using public space. Washington, DC: Island Press.
- 9. Historical Exchange Rates. (n.d.). Retrieved from https://www.oanda.com/fx-for-business/historical-rates
- 10. Lang, J. (1994). Urban design: The American experience. Hoboken: Wiley.
- 11. Lansing, J. B., & Marans, R. W. (1969). Evaluation of Neighborhood Quality. *Journal of the American Institute of Planners*, 35(3), 195-199. doi:10.1080/01944366908977953
- 12. Li, X., Hijazi, I., Koenig, R., Lv, Z., Zhong, C., & Schmitt, G. (2016). Assessing Essential Qualities of Urban Space with Emotional and Visual Data Based on GIS Technique. *ISPRS International Journal of Geo-Information*, 5(11), 218. doi:10.3390/ijgi5110218
- 13. Lynch, K. (1960). The Image of the City. Massachusetts: The MIT Press.
- 14. Pacione, M. (1993). The geography of the urban crisis: Some evidence from Glasgow. *Scottish Geographi-cal Magazine*, 109(2), 87-95. doi:10.1080/00369229318736883

- 15. Porteous, J. D. (1971). Design With People. *Environment and Behavior*, 3(2), 155-178. doi:10.1177/001391657100300204
- 16. Quality of life. (n.d.). Retrieved from https://www.thefreedictionary.com/quality of life
- 17. Razavizadeh, A. S., Majedi, H., & Habib, F. (2015). Criteria and Indicators of Presence Quality Improvement in Urban Spaces, (Case Study: Historical Texture of Kashan city). *International Journal of Architecture and Urban Development.*, 5(3).
- 18. Soltanian, F., & Mohammadi, A. (2015). Study of Characteristics of Urban Public Open Spaces based on Social Interaction (Case study: Salavatabad's 3-kilometer Route). *European Online Journal Of Natural And Social Sciences*, 4(3), pp. 553-564. Retrieved from http://european-science.com/eojnss/article/view/2759
- 19. The National Organization for Urban Harmony. (2010). Heuristic guide of foundations and standards of advertisements and signboards. Supreme council for planning and urban development. Retrieved from http://www.urbanharmony.org/en/images/T.O.R.Eng.pdf
- 20. Tibbalds, F. (2015). *Making people-friendly towns: Improving the public environment in towns and cities*. London: Taylor & Francis.
- 21. Tiwari, S. (2013). Developing a Sense of Place by Humanizing Public Pedestrian Precincts. *International Journal of Architecture and Urban Development*, 3(3), 21-26.
- 22. Trancik, R. (1986). Finding lost space: Theories of urban design. New York: Van Nostrand Reinhold.
- 23. What is quality of life? definition and meaning. (n.d.). Retrieved from http://www.businessdictionary.com/definition/quality-of-life.html
- 24. What Makes a Successful Place? (n.d.). Retrieved from https://www.pps.org/article/grplacefeat