THE REPUBLIC OF TURKEY

BAHÇEŞEHIR UNIVERSITY

A COMPARATIVE ANALYSIS OF OPEN SPACES:

A SPECIAL CASE OF KARACHI WATERFRONT

Master's Thesis

ATTIQUE UR REHMAN

ISTANBUL, 2018



THE REPUBLIC OF TURKEY

BAHÇEŞEHIR UNIVERSITY

THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

MASTER OF ARCHITECTURE

A COMPARATIVE ANALYSIS OF OPEN SPACES:

A SPECIAL CASE OF KARACHI WATERFRONT

Master's Thesis

ATTIQUE UR REHMAN

SUPERVISOR: PROF. DR EMINE OZEN EYUCE

ISTANBUL, 2018

THE REPUBLIC OF TURKEY

BAHÇEŞEHIR UNIVERSITY

THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES MASTER OF ARCHITECTURE

Title of the Master's Thesis: A Comperative Analysis of Open Spaces A special Case of Karachi Waterfront Name / Last Name of the student: Attique Ur Rehman Date of Thesis Defense: 25.05.2018

The Thesis has been approved by the Graduate School of Natural and Applied Sciences.

Assist. Prof. Yücel Batu SALMAN Graduate School Director Signature

I certify that this thesis meets the requirements as a thesis for the degree of Master of Architecture.

Prof.Dr. Emine Ozen EYUCE Program Coordinator Signature

This is to certify that we have read this thesis and we find it fully adequate in scope, quality and content, as a thesis for the degree of Master of Science.

Examination Committee Members	<u>Signatures</u>
Thesis Supervisor	
Prof.Dr. Emine Ozen Eyuce	
Member	
Assist. Prof. Senem Kaymaz Koca	
Member	
Assist.Prof. Neslihan Aydin Yonet	

ACKNOWLEDGEMENTS

I would like to express my profound gratitude to my thesis supervisor Prof. Dr. Emine Ozen Eyuce for her guidance and support throughout this thesis. For taking her time to assess my drafts, making comments and providing helpful guidance through her comments and feedbacks.

I would also like to extend my gratitude to my jury members Prof. Dr. Senem Kaymaz Koca and Prof. Dr. Neslihan Aydin Yonet for their critique and an opportunity to improve my work.

I would also like to express my appreciation to my parents Mian Muattar Shah for unconditional love and support you have shown throughout my Academic pursuit and aspirations most notably my father.

Last but not least my profound gratitude to my late niece Zulekha Shah, family, friends, colleagues, uncle Haji Gohar Ali, Mubasshir Khan, Akmal Shah, Bilawal Shah and Abdul Rehman Shah for their love, understanding, support, understanding and your perseverance throughout this journey. Thank you

Istanbul,2018

Attique Ur REHMAN

ABSTRACT

A COMPARATIVE ANALYSIS OF OPEN SPACES A SPECIAL CASE OF KARACHI WATERFRONT

Attique Ur Rehman

Architecture Master's Program Supervisor: Prof. Dr. Emine Ozen EYUCE

May 2018, 82 pages

Public open spaces in urban areas are greatly affected by neo-liberal policies, urban development, urban stability order in terms of ownership, management and discourgement of use by urban inhabitants. In a result of which public open spaces are not always desirable by the public.

Public open spaces in urban areas are transformed into places where the public is externalized due to the changing ownership of the land (privatization) under the affect of neo-liberal policies, urban developments, law and order situations. As a result, the limited accessibility of privatized open spaces create problems with the usage of these places by the general public.

On the other hand, due to the control and management of privatized urban open spaces, the environmental quality increases and this results in the increase of user preferences in contrast to public open spaces where the management is in public. The ownership affects the quality of the environment in these open spaces.

Therefore, this research will be a comparative analysis of a public open space and privately owned open space in Karachi which will entail details of impact of neo-liberal policies and current law and order situation of urban area: quality differences with regard to user's perception.

What precautions for improvements of public open spaces must be taken by the govenmental institutions, and the role of government with respect to both open spaces must be understood. The essence of this research will be to find a solution that will cater for the enhancement of the quality in public open spaces as in the privately owned open spaces.

Four key attributes of successful public open spaces were taken into consideration for this study. As these attributes are accepted as a quality indicator for evaluation of successful public open spaces, according to the updated literature available. These attributes are namely: accessibility, confortabiliy, socizalization and avalibity of alternative activities.

Keywords: Public Open Space, Privately Owned Open Spaces, Ownership, Quality Perception, Karachi

ÖZET

AÇIK ALANLARIN KARŞILAŞTIRMALI BİR ANALİZİ KARACHI WATERFRONT'UN ÖZEL DURUMU

Attique Ur Rehman

Mimarlık Yüksek Lisans Programı Tez Danışman: Prof. Dr. Emine Ozen EYUCE Mayıs 2018, 82 sayfa

Kentsel alanlardaki kamusal açık alanlar, neo-liberal politikalar, kentsel gelişim, kentsel istikrar, kentsel nüfusu tarafından sahiplenilme, yönetme ve elden çıkarma anlamında büyük ölçüde etkilenmektedir. Kamu açık alanların kamu tarafından her zaman arzu edilmediği bir sonuç olarak.

Kentsel alanlardaki kamusal açık alanlar, neo-liberal politikalar, kentsel gelişmeler, hukuk ve düzen durumlarının etkisi altında toprağın değişen mülkiyeti (özelleştirme) nedeniyle halkın dışsallaştırıldığı yerlere dönüştürülür. Sonuç olarak, özelleştirilen açık alanların sınırlı erişilebilirliği, bu yerlerin halk tarafından kullanılmasıyla ilgili sorunlara yol açmaktadır.

Öte yandan, özelleşmiş kentsel açık alanların kontrolü ve yönetimi nedeniyle, çevre kalitesi artar ve bu da yönetimin kamuya açık olduğu kamusal açık alanların aksine kullanıcı tercihlerinin artmasına neden olur. Sahiplik, bu açık alanlarda çevrenin kalitesini etkiler.

Bu nedenle, bu araştırma, kamusal açık alanın ve özel olarak sahip olunan açık alanın, neoliberal politikaların etkisinin ayrıntılarını ve mevcut yasaların kentsel alandaki durumunu ve kullanıcının algısına ilişkin kalite farklılıklarını içerecek bir karşılaştırmalı analizi olacaktır. Kamu açık alanlarının iyileştirilmesi için hangi önlemler, devlet kurumları tarafından alınmalı ve hükümetin her iki açık alanla ilgili rolü anlaşılmalıdır. Bu araştırmanın özü, özel açık alanlarda olduğu gibi, kamusal açık alanlarda kalitenin arttırılmasına yönelik bir çözüm bulmak olacaktır.

Bu çalışma için başarılı kamusal açık alanların dört temel özelliği dikkate alınmıştır. Bu nitelikler, güncel kamuusal açık alanların değerlendirilmesi için bir kalite göstergesi olarak kabul edildiğinden, mevcut güncel literatüre göre. Bu özellikler şöyledir: erişilebilirlik, uygunluk, sosizalizasyon ve alternatif etkinliklerin avalibiliği.

Anahtar kelimeler: Kamusal Açık Alan, Özel Kamusal Açık Alanlar, Sahiplik, Kalite Algı, Karaçi

TABLESvi	iii
FIGURES	ix
1. INTRODUCTION	1
1.1 URBAN OPEN SPACES	1
1.2 PROBLEM STATEMENT	1
1.3 STUDY AREA	2
1.4 SCOPE OF THESIS:	
1.5 RESEARCH METHODOLOGY:	5
2. LITERATURE REVIEW	7
2.1 DEFINITION URBAN OPEN SPACE	7
2.2 HISTORY OF PUBLIC OPEN SPACE	7
2.3 CHARACTERISTICS OF URBAN OPEN SPACE	.11
2.4 QUALITY OF PUBLIC OPEN SPACE	13
2.4.1 Accessibility:	13
2.4.2 Comfort:	
2.4.3 Socialization:	14
2.4.4 Activity:	15
2.5 TYPES OF URBAN OPEN SPACES IN TERMS OF OWNERSHIP	
2.5.1. Public Open Space	.17
2.5.2. Privately Owned Open Space	.18
2.6 RELATION OF PUBLIC OPEN SPACE ON QUALITY OF LIFE	19
2.7 WATERFRONT: A SPECIAL CASE OF PUBLIC OPEN SPACE	20
2.7.1 The waterfront Phenomenon (Bringing People back to the waterfront)	20
2.7.2. Importance of waterfront	21
2.7.3 Patterns of Waterfronts	22
2.7.4 Characteristics of Waterfront	23
3. OVERVIEW OF PUBLIC OPEN SPACE IN KARACHI, PAKISTAN	. 25
3.1 GEOGRAPHICAL LOCATION	26

CONTENTS

3.2 HISTORICAL SITUATION
3.3 URBANIZATION
3.3.1 Historical Overview of Urbanization in Karachi (1843-2001)
3.3.2. Contemporary Urbanization in Karachi after 2001:
3.4. CONTEMPORARY URBAN PROBLEMS IN KARACHI
3.4.1 Impact of Neo-Liberalization/ Urban Development41
3.4.2 Impact Of Urban Stability Order50
3.5. KARACHI STRATEGIC PLAN 202055
3.5.1. Conclusion from the Strategic development plan 2020
3.6. IMPACT ON PUBLIC OPEN SPACE IN KARACHI (A SPECIAL CASE OF 59
WATERFRONT)59
4. THE STUDY AREA, STUDY AND RESULTS63
4.1 KARACHI PUBLIC AND PRIVATELY OWNED OPEN SPACE63
4.2. PRIVATELY OWNED OPEN SPACE (AK KHAN PARK)64
4.2.3 Burger King Karachi Sea View67
4.3. PUBLIC OPEN SPACE (SEA VIEW KARACHI)
4.3 COMPARATIVE ASSESSMENT70
4.4 ANALYSIS OF SELECTED PUBLIC SPACES WITH RESPECT TO70
WATERFRONT CHARACTERISTICS70
4.4.1 Comparative Analysis of both Open Spaces with regards to characteristics of 70
Waterfront design70
Source: Researcher72
4.5 ANALYSIS OF SELECTED PUBLIC OPEN SPACES IN KARACHI WITH 73
RESPECT TO CHARACTERISTICS OF PUBLIC SPACES73
4.5.1 User's needs concern and attitude towards both spaces
5. CONCLUSION AND DISCUSSION
REFERENCES85
APPENDICES92

Appendices A.1 Questionnaire for research survey94	Appendices A.1	Questionnaire for	r research surve	y	94
--	-----------------------	-------------------	------------------	---	----

TABLES

Table 2.1: List of similarities of characteristics of open spaces	.21
Table 3.1: Population growth of Karachi	.34
Table 3.2: Factors enlistment that affects public open space in Karachi	.50
Table 3.3: Land use plan, Karachi	.69
Table 4.1: Analysis of Open spaces with regards to characteristics of waterfront	.70
Table 5.1: Research problems and findings	92

FIGURES

Figure 1.1: Google map Karachi DHA	2
Figure 2.1: Greek Agora- Ancient Public space	8
Figure 2.2: the Roman Forum	9
Figure 2.3: Piazza Del Campidoglio, Italy	.10
Figure2.4: Types of outdoor activities	.17
Figure 2.5: Public Open Space- thousand lantern Park, China	18
Figure 2.6: Privately Owned Public Space -City Hall	19
Figure 2.7: Pattern of waterfront	26
Figure 3.1: Pakistan in WorldMap	.25
Figure 3.2: Karachi in Pakistanmap	.29
Figure 3.3: Karachi in1700's	.31
Figure 3.4: Karachi in 1856	
Figure 3.5: Historical sprawl of Karachi from 1838-1922	34
Figure 3.6: Karachi Plan 1955	36
Figure 3.7: Urban sprawl and population of Karachi in 1974	37
Figure 3.8: Karachi Plan 1987	38
Figure 3.9: Landsat Imagery- Land Use Karachi Plan,2001	.39
Figure 3.10: Population of Karachi- 2002	39
Figure 3.11: Terrorism casualties in Karachi	51
Figure 3.12: Burns Garden closes for security concern in Karachi	52
Figure 3.13: Karachi Coastline	41
Figure 3.14: Subjected Areas for Reclamation in Karachi	42
Figure 3.15: before and after google image of Crescent Bay -2001	43
Figure 3.16: Proposed Emaar Project for Crescent Bay	47

Figure 3.17: Clifton after reclamation, before and after image,	.48
Figure 3.18: DHA land reclamation-1947 to 2009	46
Figure 3.19: DHA Land reclamation behind Creekclub	50
Figure 3.20: Gentrification of fisher community from coastal area	.51
Figure 3.21. Man feeding meat to birds as ritual	.49
Figure 3.22 Shrine of Sufi Saint Abdul Shah Ghazi in Clifton Karachi	.49
Figure 3.23: Karachi Strategic plan 1990	.54
Figure 3.24: OccupyKarachi	54
Figure 3.25: Karachi Plan 2020, KSDP2020	.55
Figure 3.26: Land Use Plan 2006, KSDP 2020	.57
Figure 4.1: Karachi Sea view Clifton	. 63
Figure 4.2: Privately owned Public Space, Clifton	61
Figure 4.3: Entrance of AK Khan Park	62
Figure 4.4: Inner view of AK Khan Park, on Left MCDonald's	63
Figure 4.5: Mc Donald's sea view Karachi, Pakistan	64
Figure 4.6: Burger King Karachi Sea view	64
Figure 4.7: Sea view Karachi, Left AK Khan Park, Right Sea View Beach Karachi	65
Figure 4.8: Images of sea view, Researcher	78
Figure 4.9: Pedestrian Promenade along Public spaces of waterfront	80
Figure 4.10: Image of Kiosk installed on Pedestrian Promenade	80
Figure 4.11: Water Selling for cleaning, Costs up to 0.20\$ per	
bottle7281	
Figure 4.12:Gender participants in both open spaces	82
Figure 4.13: Age wise participants in open	
spaces	
Figure 4.14: Comparative accessibility of both open spaces	83
Figure 4.15: Quality ranking of accessibility in public open space (Sea View)	84

Figure 4.16: Quality ranking of comfort ability in public open space (SeaView)	85
Figure 4.17: Discomfort ability in public open space	85
Figure 4.18: Socialization quality in public open space	.86
Figure 4.19: Factor influencing Socialization quality in public open space	.87
Figure 4.20: Activity quality in public open space	.88
Figure 4.21: User's visitation timings	90



1. INTRODUCTION

1.1 URBAN OPEN SPACES

The urban built form are composed of buildings and open spaces, which makes the formation of urban spaces. These formation of urban spaces makes the relation of solid and void in an urban built environment. These urban voids are a vital component in the context of built environment. These voids in an urban built environment are known as urban open spaces. Urban open spaces in a built environment are further categorized according to ownership which includes: (I) public open space (II) privately owned open space.

In modern context, public open spaces are explained in different manners and perspectives such as Carr et al.'s define public open spaces should be open and accessible to each and every inhabitant of society without any limitation (Rivlin & Stone,1992).

Public open space is a place that is accessible to the public without any barriers such as parks, beaches, squares, sidewalks, etc. These spaces all serve different functions, and can easily be seen in different spatial terms. The importance of public open space is to create a social and interactive relation between societies which will lead to formation of community bond. Public open space provides us a platform to rest, relax and spend their leisure time in a dynamic livable relax space. Public open spaces serve their role in various manners in our lives. Benefiting our health, public open spaces such as parks create a relaxing and inviting atmospheres where people can come and decompress from their stressful daily routines at home or work. Public open space also helps to build a sense of community, civic identity and culture. Participation of community with these spaces attracts public and get together which initiates interaction of different people to create a sense of community formation.

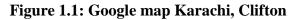
1.2 PROBLEM STATEMENT

Neo-liberal policies, urban development and urban stability order are some of the factors that significantly impact the existence of open spaces. The impact of these factors comes up with the cost of segregation of land uses, privatization, gentrification, land reclamations and

creating quality differences in all land use types. Due to which lower quality spaces are left abundant and not always desirable as compare to high quality spaces. Similarly is the case with open spaces where quality differentiate spaces and discriminate its user's. Which is totally opposite to the concept of universal access in public spaces. Public discrimination is that not all the public are welcome into open space. This discrimination can be seen in open spaces within private enterprises with limited accessibility and private ownership. Also, the current situation of terrorism and increase of crime rate led urban inhabitants limited to spend more of their leisure times in privately owned public open spaces or either in their houses. The similar case can be seen in Karachi waterfront at Clifton, where huge developments took occurred and still occurring, which has led it to differences of land uses entitlements to the private sector, gentrification of several villages on coast and segregation of land regarding the public and private sector. Therefore my thesis aims at understanding the causes and effects of these neo-liberal policies, urban developments, the current situation of Karachi law and order that shapes and segregates these publicly and privately owned public open spaces on the waterfront of Clifton, Karachi. Furthermore, to evaluate the quality of both open spaces to understand the user's concern's and attitude towards these open spaces and to make precaution for improvements of open spaces in Karachi.

1.3 STUDY AREA

The selected scope of the area for this study lies along the Clifton and Defense housing authority (DHA), Karachi, comprises of 3 Km long coastline (fig, 1.1).





Source: Google maps, 2018

Why Clifton, Karachi

Reason for selection of this area for study is being a point of attraction within Karachi which is visiting all urban inhabitants with a high frequency of visitations. As being a center of attraction, Clifton is always subjected to developments due to its strategic geographical location along the coastline. Moreover, also the availability of both desired public open spaces for studies.

This study would help us to analyze and compare the quality of both open spaces in Karachi waterfront, which would enable us to answer the following research problem questions such as;

- A) What is the nature of open spaces that can be found on the waterfront of Karachi, Clifton?
- B) 2) How does these impact of neo-liberalization policies affect the quality of open spaces and why are these differences can be found in both open spaces?
- C) What precautions can be taken into consideration to improve the quality of open spaces in Karachi to increase public satisfaction level?

1.4 SCOPE OF THESIS:

In this thesis, I will be discussing the public open spaces types in an urban area of Karachi with the main theme of discussion; analyzing the impact of neo-liberal policies, urban developments and current law and order situation of the urban area on the public open spaces in Karachi. Also evaluating the quality of both spaces with regards to user's perceptions to get two objectives;

A) What and why are these reasons that can be found for quality differences in both open spaces?

B) To make a list of precautions for the quality improvements of public open spaces in Karachi.

Through the process of analyzing the quality indicators for a successful public open space. In order to do that, a study of comparative analysis has been conducted to evaluate the quality of both public and privately owned open space. A list of precautions will be generated as a result of quality improvement of these spaces. Concluding further projections that will aid institutions, researchers, and practitioners in the public space delivery, usage and enhance its performance in the city of Karachi. Within the scope of the text, an introductory chapter has been provided to clarify what public space is perceived and connotes in meaning context to the region of Karachi.

The second chapter provides a literature review of public space, its historical spatial transformation and usage from time to time and region. Furthermore giving brief literature regarding the attribute factors of public space. Which is the essence of this study and became the outline for this study to evaluate the quality of public open spaces types. Moreover, the relation of public open space with the quality of life. As the desired public open spaces subjected for this study lies along the coastline of Karachi at Clifton, a short go-through with the literature related to the waterfront and its characteristics has been discussed for the reason to relate the characteristics of waterfront with public open space to make a comparative assessment.

In third chapter illustration about the general overview of Karachi, its historical sprawl, problems with regards to the city and public open spaces which came as result of various factors including urban development, neo-liberal policies, privatization, land reclamation, gentrification, segregations of land use, flaws in law amendments, areas subjected to reclamations and current situation of urban area respect to optimization of law and order balance. The main purpose of this chapter is to let us know impact of neo-liberal policies, urban developments and urban stability order of Karachi does impact the city and public open spaces. Also from where it get started and what came in the result of these strategies and flaws.

Chapter 4, moreover focuses on into the study area which lies along the coastline of Clifton, Karachi. The study area has been discussed briefly, which composes of public open space and privately owned public open space. A comparative analysis of quality has been done to evaluate both spaces with regards to user's perception. As this segregation of spaces came into being after entitlement of private entities from the result of neo-liberal policies, urban development and urban stability order in Karachi. So, we will know do these factors really have an impact on public open spaces and if there is, so what and why these differences are. Also what precautions can be taken into consideration to increase the quality of public open spaces in Karachi.

The last chapter discusses the findings and draws conclusions based on the result evolved from the evaluation of both spaces with the aim of enhancing lower quality public open space with another possibility of dimensions of public open spaces in Karachi.

1.5 RESEARCH METHODOLOGY:

To answer the following questions, the research method adopted for this research as following;

The research composed of Qualitative and Quantitative Approach, furthermore into it comparative analysis is used to ease the research and differentiate both types of spaces for this study. Descriptive and spatial of physical characteristics of public space in Karachi (selected area will be analyzed regarding survey and questionnaires of common characteristics of public space).

- Analysis: The research composed of comparative analysis. A comparative analysis of public open space and private-public space is initiated to differentiate these spaces on behalf of common features of all public space types. Which are as follows;
- ii. Activity (II) Comfortability (III) Socialization (IV) Accessibility

These features are further subdivided into more and survey questionnaire is developed, which will be distributed to users and shop vendors to give their remarks with regards to these spaces while conducting the survey.

i. Survey: for identification of users from various aspects and questionnaires distribution.

ii. Questionnaires: a list of questionnaires would be distributed to three;

i) Expertise (II) Residents of Karachi- Defense Housing (III) Shop vendors

IV) Interviews: Sets of interviews conducted with:

Resident/User/Shop vendor on Karachi waterfront

- I) KDA (Karachi Developmental Authority)
- II) DHA (Defense Housing Authority)

V) **Observation**: the Desired area of study is observed from different

Dimensions such as pedestrian promenade, spatial

Analysis, nature of these spaces, etc.

2. LITERATURE REVIEW

2.1 DEFINITION URBAN OPEN SPACE

A broadly understood set of meanings comes to attach to urban open space. A widely shared appreciation of what is expected and acceptable to this particular place arises from the historical process of adjudicating the multiplicity of claims to the enjoyment of the same, public space. (Goheen 1994).

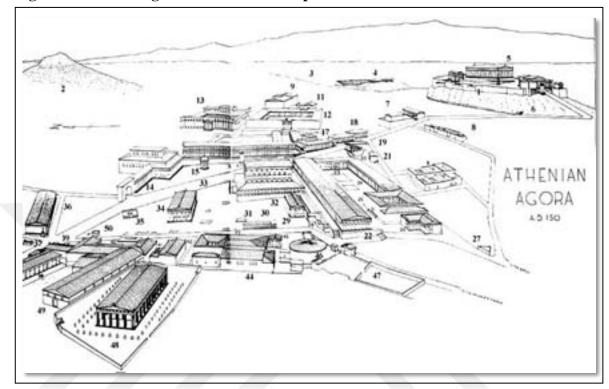
The definitions of urban open space vary in their area of focus depending on the background of the person defining and the purpose of the definition. In this part of the study, some definitions are listed for the sake of acknowledgment and will not necessarily be adopted. Drawing from these definitions, a summary of significant characteristics is going to be discussed at a later stage within the broader context for to evaluate the quality of both public open and privately owned open space.

2.2 HISTORY OF PUBLIC OPEN SPACE

Historically, the existence of open spaces in the ancient cities was rare due to these cities were small, fortified, dense, and mainly it was only concerned with the dwelling of their inhabitants. Streets were the primary mode of transportation for goods and pedestrian movement within the city. The public spaces of the city were usually used to be found near the commercial area or small markets. Often, these later plazas were designed and planned by the ruling elite of the time to establish gathering areas for commerce, military, or religious functions (M.E.Smith, 2002).

For historian of urban open space (e.g., Crouch , 1981; Carr et Al ., 1992; Madanipour, 2003; Carmona et al., 2008), the correspondence between ancient Greek urban outer space and democratic praxis often represents the start point, as the Greek agora has become a symbol of the public sphere in modern literature as shown in fig, 2.1.

Figure 2.1: Greek Agora- Ancient Public space

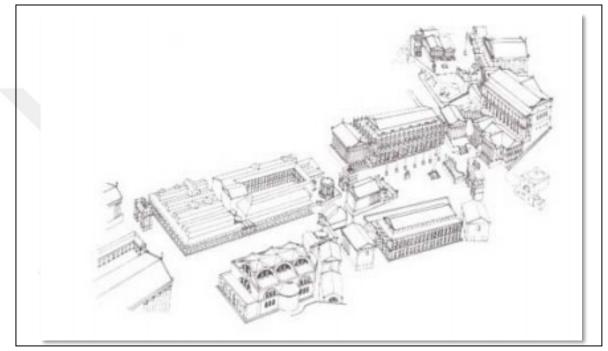


Source: http://www.agathe.gr/overview/the_archaeological_site.html

The earliest well-known example of public squares is Greek's "Agora." Which played an essential role in the aspects of its democracy by shaping Greek cities. The Greek agoras used to perform as a platform for all kind of gatherings such as; theatre performance, political, musical, athletic gaming and commercial activities.

Similar to Greek Agora, the next well known in the history of open spaces are the Roman forum. It has the similar ample open space with a purpose for people gathering for socioeconomic issues and political reasons. The formation of Roman forum was from the combination of agoras and Acropolis (Mumford, 1961). Whereas in comparison to them, the Roman forum included more events such as spaces for worships and jurisdictional courts. At start, roman forum was the heart of the city but during the ending stage of Roman Empire, the Roman forum lost its importance and people start neglecting it. After the collapse of Roman Empire, churches and cathedrals were transformed from basilicas. In the middle ages, churches and cathedrals became the focus of daily lives. Most of the open public spaces were shaped around religious buildings. During this period commercial activities took place also in public spaces. Due to which open public spaces were mainly used for religious festivals, and as commercial marketplaces in the Middle Ages. In some European countries, civic squares and piazzas emerged during this period.





Source: www.khanacademy.org/humanities/ancient-art-civilizations/roman/beginners-sguide-rome/a/forum-romanum-the-roman-forum

Public open spaces were created on the main design principles of axial order, balance, and hierarchy in the Baroque period. These principles became central design principle for the creation of public open spaces onwards. In this period, the primary focus of designing open spaces was to create visual and festival effects. Piazza Del Campidoglio is one of the earliest examples of Baroque style open spaces which was designed by Michelangelo, figure 2.3. According to Zeka, the Baroque concept of "dynamic motion in space" was introduced in Piazza Del Campidoglio.

Figure 2.3: Piazza Del Campidoglio, Italy



Source: https://www.infotour.ro/ghid-turistic/piete-si-zone-centrale/piata-capitoliului-din-roma-3660

During the 19th century, a dramatic change has occurred with regard to urban design and planning due to the industrial revolution. The developments of transportation networks such as railways led it towards an increase in the population of an urban area and made it a big city. The industrial estates were developed near to the city and as a result of which peoples started to get dwell in the city. As the rise of population in the city, the middle class was the most prominent in the participation of any field of work and city life especially for women's. Many forms of workshop colonnade, shopping avenues such as streets, bazars and departmental stores were created as a new form of public space. The morphology of city also affected due to the change in the social, economic and political structure of the city changes.

In the 19th century, a campaign for the transformation of public spaces was started to make it green. Due to the increased population, the city structure started to get dismantle for the fulfillment of inhabitants needs and prevent environmental effects from these population.

During the 20th century, the population was still growing and after the arrival of the automobile into cities which triggered more of the population towards cities. As a result of which the cities become more and more expanded towards outskirts. The outcome of which pedestrian movement and freedom were compromised into limitations. Many urban squares

were transformed into crossing for the purpose of development in the 20th century. The trends and lifestyle of the new generation is also one of the cause for the decline of open spaces for public use. The end of 20th century, the spread of internet use and virtual environments appeared as new "social platform" to spend more of their times.

2.3 CHARACTERISTICS OF URBAN OPEN SPACE

The characteristics of open spaces vary from author to author, researchers, perception, ideology, and regions. Whereas, all of the characteristics are somehow related to each other and also can be used to create successful open spaces.

Carr et al. define open space that it has to be open and accessible for all people to have their group or individual activities. Furthermore into it, discussing ownership and management of open spaces which are under public or either in privately owned but open to public (Carr et al. 1992: 50). This definition highlights four essential elements in defining open space or any space in the built environment: **access, use, control, ownership, and activity**.

On the other hand **Madanipour's** definitions of open spaces highlighted many characteristics. He suggested that the ownership and management of open spaces should be under public. Where they cam decide and utilize the space accordingly to their needs and culture. In short public of the concern, region would decide the fate of their open space and usage. In conclusion from Madanipour statements, the main focus is on the **"Intrest"** as another dimension of open space; that it should be the concern of people as a whole for such spaces to become public. Madnipour highlighted the role of **ownership, control and user's interest** as another dimension for characteristics of open spaces.

Altman in his analysis, he was more focus on the availability of the open spaces to the majority of the public. Also, he concerns about the occupancy and management of the open spaces should be under public (Altman 1986:151). Altman latter on introduces the division of open spaces into two; primary and secondary as due to their social norms. These primary and secondary paradigms are having a relationship with users of the open space. So the user's became a character of open spaces by Altman (Altman 1986: 128-35). In the conclusions of

Altman's statements, the characteristics he defined are; Availability as **accessibility**, occupancy as **ownership**, management as **control**, **users and social**.

Mitchell (1995a) and Lefebvre (1991:73) in their description of social space; discussed the similar characteristics as Altman that is to have a space that permits greater access and prohibit activities.

Thompson (2002), discusses the change in the existence of open space by the turn of 20th century. Moreover, he mentioned, "what we seek now is not a place for **social** conformity so much as an inclusive space that serves a heterogeneous society." In his statement, which is directing towards that the **control** of open space. Which also has been concluded from Car et al, Madnipour and others be granted access to that space.

Many researchers described various attributes of public space. Such as **Elif karaçor** discuss **accessibility, comfort, socialization, and activity**. Whereas other discuss **social life, activities, access, and identity** as attributes of public space.

2.1: Table for a list of similarities of characteristics of open spaces by different

S.no	Author	Characteristics
1	Car et al	Access, use, control, ownership, activity
2	Madnipour	Ownership, control, user's, access
3	Mitchell	Social, access, activity,
4	Lefebrve	Social, access, activity
5	Thompson	Social, control
6	Altman	Access, ownership, control, user's

Authors

7	PPS	Social, activity, access, identity
8	Elif Karacor	Access, comfort, social, activity

Source: Researcher

These attributes are various in all open space types, but the common ones assumed from the different updated literature are access, comfort, socialization, and activities. The mentioned assumed common attributes of open space would be used throughout the research.

2.4 QUALITY OF PUBLIC OPEN SPACE

Quality of public space depends upon the key attributes of public spaces which are varied by different authors and researchers. The key attributes for analyzing the quality of successful public open space in this thesis are further described below.

2.4.1 Accessibility:

Accessibility means to have access to specific space or place. In the context of open space, accessibility is the major factor open space that is to have access to an open space without any barrier and limitation. Also, it has to be accessible to all of its user's types that include public, society and individual without any discrimination of gender, income and ethnic group.

Accessibility is further categorized into two parts that are (i) physical accessibility (ii) visual accessibility.

Physical Accessibility is to reach space or place of your desired destination without any barrier or stoppage. Whereas visual accessibility is to have a clear view of sight of the desired space or space.

Many authors have discussed accessibility and recognized it as a key factor for the successfulness of open spaces. Such as Madnipour, he discussed access as key factor of open space, those spaces who do not have accessibility is not considered to be genuinely public

open space. Physical access to spaces is also associated with the proximity of public transportation and presence of walkable streets.

2.4.2 Comfort:

Open spaces are part of an urban area, where the public visit to have their leisure time. People want to stay and spend more time in public spaces that offer a degree of comfort which is also suggested by Holland et al. (2007). One of the benefits that we get from open spaces is that they provide a sense of comfort and stress relief from our daily routines.

To have the quality of comfort within an open space, following factors have to be focused while designing of open space. Such as; Cleanliness, the perception of cleanliness are often bothering user's, and places to sit have to be provided in sufficient amount for public (Place making Chicago, 2016). Security measurement, as usage of open spaces, can be influenced by the perception of crime and fear. Therefore open space should give a feeling of secureness (Lloyd and Auld, 2003). Weather focused, Outdoor human comfort is one of the most influencing factors that affect the preference of public with regards to usage of open space. Therefore, open space should provide outdoor comfort and relevant spaces of activities or shades as accordingly to the climate of the region. Comfortable open spaces should be designed as pedestrian-focused to achieve pedestrian movement from one to another. Therefore, motorized vehicles should draw back for safety needs. As a conclusion from the comfortability aspects of public spaces, the following elements must be taken into consideration for designing urban open spaces; cleanliness, places to sit, security measurement and pedestrian-oriented spaces.

2.4.3 Socialization:

Open spaces are the venues of an urban area to achieve social gathering and interactions. As a venue of providing an opportunity for social gathering and interactions among each other. This could lead the formation of strong bond among community and neighbors, which could reduce the crime rate and anti-social behavior "Carmona et al. (2008)". Socialization of open space has to have the qualities of accuracy, eligibility, and universal access for all. Accuracy means to have a platform for right spaces provided for meeting with friends or family. Eligibility is that public should not be limited to their visit being alone, there should be no restriction for individuals to come in a group and get socialized. Universal access that is, all of the urban inhabitants are allowed and socialize in open space without any discrimination of ages and ethnic groups.

Open spaces are multi-functional where all of the people can perform their public roles. These spaces includes meeting spaces and places taking place collective memories, which leads us to consider the role of meaning in place making (Montgomery, 1998).

2.4.4 Activity:

Open space provides a platform to provide a wide range of activities. Activities can be considered as a primary factor to improve the quality of open space. Which is also defined and discussed by many researchers such as Mitchell, Lefebvre, Elif, and others. The activities that need to address are; active recreation, passive recreation, spaces by children, and spaces by genders. Active recreation includes cycling, camping, fishing, hiking, horseback riding and others. Whereas passive recreation consists of hiking, running, bicycling, fishing, hunting and others. Spaces by children's that includes a space allotted for children's to play and perform their activities in a secured space. Spaces by genders have address people with different ages and gender groups, and also space should be there for taking into consideration of disabling and elderly old people.

Open spaces that are had some activity to perform will be a reason for the public to come and visit this place. However, if there is nothing to do, these spaces would be left abundant and will remain empty (PPS, 2016). Moreover, the design of the open spaces and providing spaces for activities should keep consideration of time and in various seasons. To increase socialization in open spaces, activities can play a significant role. While doing some group activities, the participants will get together, socialize and interact with each other.

According to Gehl's (2011), people activities attract other people, and public spaces which have things to do could attract other people as well. If there are things to do people want to spend time in public spaces. Opportunities to act, things to do, and activities to be involved in should be considered more than walking and sitting opportunities. Activities can be further

classified into three which are also mentioned by Jan Gehl in his book of 'Life between buildings; using public space, which are **Necessary activity, optional activity, and social activity** as shown in figure 2.4. Necessary activity is that activity which not compromise whereas optional is which can be done only with favorable desire, time or exterior condition and social activities are those for social purpose. All of these activities depend upon the quality of a space. If the quality of the space is good so all of these activities can be done and vice versa.

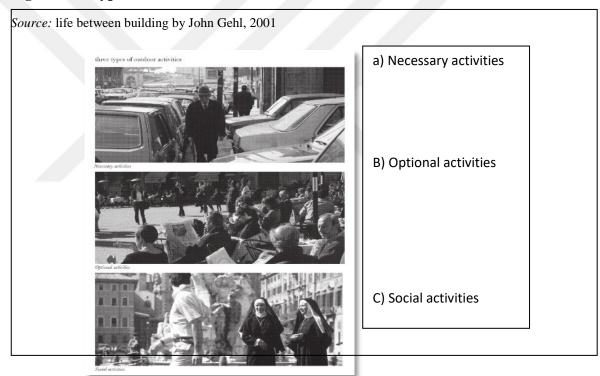


Figure 2.4: Types of outdoor activities

2.5 TYPES OF URBAN OPEN SPACES IN TERMS OF OWNERSHIP

In a urban built evnivronment, urban spaces are catogrized regards to their ownerships. Therefore, there are two types of urban open spaces can be found which are:

i) Public Open Space (ii) Privately owned open space

2.5.1. Public Open Space

Public open spaces are those spaces, which are outdoor and open for peoples to get access. These spaces include parks, bazzars, streets, retail, pedestrian paths and others. Madnipour (1999) defines public open space, as to have space with unlimited access whereas others authors define public open space in various ways such as to have space with social, user, and other factors. Furthermore, Madnipour highlighted the user is as an essence of public open space. Which he mentioned that the control and management of open space have to be under public to be genuinely public open space. Public open space is successful while it becomes a platform for providing a wide range of activities that bind and mix together the whole community to each other create the sense of higher socialization among the public. Moreover public open space should promote psychological comfort and safety for its user's (Gehl,2002). In the physical existence criteria, it should be readily accessible. To do that a clear easy accesible and movement patterns should be available. Successful public open space should promote psychological comfort and safety (Danisworo, 1989). High-quality architecture could reach pleasant public open space, attractive building façade, exciting scene, and details (Gehl, 2002; Avila 2001). Natural elements are an essential factor in public open space that improve comfort, relaxation, pleasant experience and anticipate unpleasant climate by placing trees along the pedestrian path and sitting area (Kaplan an Kaplan, 1989; Avila, 2001).



Figure 2.5: Public Open Space- thousand lantern park, China

Source: https://www.archdaily.com/298385/klyde-warren-park-the-office-of-james-burnett

2.5.2. Privately Owned Open Space

Privatization is a kind of public-private partnership whereby private entities and city officials negotiate directly with one another (Slangen, 2005). There are some fields of public interest become privatized such as education, public health, housing and public space (Kressel, 1998). Privatization of public space can be in the form of buildings such as shopping malls, coffee houses, festival marketplaces, fitness centers, themed historical destination, juice bars, pay-for-playground and the like (Day, 1999). According to Slangen (2005), one of the factors which push privatization of public space is a financial issue. When government's budget for this field being cut, public open space quality tends to decrease. This situation solved by privatization, whereby private sector invests a sum of money to enhance the quality and management of public open space. Public open space was designed to support human interaction and political debate since ancient times. However, problems arise when such public realm entered in 'private region,' particularly in the issue of 'profit-oriented tradition' of the private sector (fig, 2.6).

Krupa (1993) claims that privatization has transformed the forums for public life; cities have become "a series of racially and economically segregated private enclaves." Kressel (1998) - in the critics of fast growth of the mall as one kind of public space privatization - states that privatization of public open space has some immediate commercial purposes. It can be highly profitable to developers, and it enables large-scale property owners to exclude "undesirables"—the homeless, the down-market, the non-shoppers—from places of investment and privilege intended to attract up-scale suburbanites, the urban elite, and tourists with disposable income. Besides that, Kressel worries that public space privatization will destroy democracy. According to Kressel, democracy cannot survive when we have no place to gather where there is "no purchase necessary" (Kressel, 1998). It is similar with Kohn (2004) who claims that one of the key components of transforming public open space into privately controlled space is that it impacts who can occupy space and what types of activities can be engaged. She argues that the current trend of privatizing public space has sociological implications that it limits free speech, a central underpinning of having a democratic polity. Day (1999) claims that privatization push consumerism and control audience behavior and design. The positive point of view of privatization relates to management and quality improvement of public open space (Melik, 2009; Slangen, 2005).



Figure 2.6: Privately Owned Public Space - City Hall

2.6 RELATION OF PUBLIC OPEN SPACE ON QUALITY OF LIFE

The urban quality of life is the outcome of the interaction of man and urban environment (Das, 2008). The satisfaction level with the urban environment is one of the indicators of quality of life (Sirgy dan Cornwell, 2002). Open spaces are one of the elements for the urban built environment. Thus, the quality of life for urban inhabitants can find out from their satisfaction with open space of a built environment. Good quality of open space, a place for both as a physical structure and many kinds of activities has a benefit to quality of life, especially in fulfilling people needs to health, recreation, and a good quality urban environment. Trees and garden as one of the public open space for many kinds of activities, public open space gives some advantages for quality of life, such as psychological and physical health, recreation's benefits and the fulfillment of the need for a pleasant urban environment (Maller et al, 2009). Thus, a good perception of open space can give impact to a good quality of life. According to Gehl's (life between building) built environment is directly related to the quality of public space. Its characteristics can further determine quality

Source: https://tr.pinterest.com/barbarasouthwor/walkability/

of public space, better the quality of public space, the better it would have an impact on quality of life.

2.7 WATERFRONT: A SPECIAL CASE OF PUBLIC OPEN SPACE

The term "Waterfront" means land, land with buildings, or a section of a town fronting or abutting on a body of water (Merriam-webster, dictionary). The concept of re-use waterfront as an alternate for public open space in urban setting came into being nearly five decades ago. The main reason was to reuse the leftover industries, railways and ports along the waterfront for public entertainment, social and space for leisure. The initiated reuse of waterfront was welcomed by the public as for their demands to have accessibility to water for social use. This phenomenon of waterfront re-use for public purposes was first initiated in North America than to the rest of the world. Overall, many projects initiated in this regard and was successful to achieve its purpose, which was to bring the public to the waterside.

Other seaside urban communities are witnessing, this phenomenon of re-use waterfront for public purposes in a different manner. The city-water relationship continues changing, contingent upon the capacities taking put on those reclaimed lands (e.g., air terminals, parks, lodging, parkways, and walkways), and the general approach of arranging and planning experts towards accessibility to the water. These reclaimed lands for developments came up with consequences of segregating these urban open spaces into two; Public open space and privately owned open space in developing countries.

2.7.1 The waterfront Phenomenon (Bringing People back to the waterfront)

Since its inception in Baltimore, four decades ago, the phenomenon of waterfront regeneration, or what became known as the Baltimore Syndrome, is still in full swing, expanding to new frontiers and taking a variety of shapes (Breen & Rigby 1996). The decline of ports and the industrial areas around them was soon met by redevelopment programs (Hall 1993: 13). Many factors are considered as the sources of the phenomenon. However, the two most important are the economic transition from industrial to post-industrial service base and the high concentration of population at waterside locations (Clrake 1972). Tunbridge (1988: 68) suggested that there is more to it than opportunity and demand. He and Malone (1996:

2) placed waterfront revitalization in the broader perspective. To them, the movement provides a parallel thread to the overall urban regeneration process. Moreover, it is affected by the existing motive forces of that movement, besides those factors that are inherently water-related. However, Wood (1965) suggested that waterfronts are naturally prone to renewal and regeneration because they are usually in the oldest parts of the city. In agreement with this, Jones (1998) added that the waterfront movement, particularly in the US, is attributed to a few factors among which are the expanding amount of leisure time and pressures to conserve the architectural heritage of those abandoned waterfronts.

This phenomenon of the waterfront was initiated to bring people back to the waterfront as public open space. The main idea was to re-use the abundant leftover industries, land, and ports available for public refreshment or leisure purpose. Other seaside urban communities are witnessing, this phenomenon of re-use waterfront for public purposes in a different manner. The city-water relationship continues changing, contingent upon the capacities taking put on those reclaimed lands (e.g., air terminals, parks, lodging, parkways, and walkways), and the general approach of arranging and planning experts towards accessibility to the water. These reclaimed lands for developments came up with consequences of segregating these public space into two; Public open space and privately owned public space in developing countries.

2.7.2. Importance of waterfront

In ancient times, human civilization starts from the edge of the water. A while back, the river is related to the core of general public, particularly in the beginning of the opening of human settlements. The purpose of the river valley was chosen as the area of early human settlement is a direct result of the consistent water supply. The river likewise furnishes fundamental transport and correspondence with the wellspring of protein. The appropriate atmosphere and fertile soil are additionally the fundamental attributes of the choice of waterways. The majority of the city begins from the settlement on the shores of the waterway side. Water has the enchantment to pull in individuals and has been a most desired area of festivity and function. It can go about as a point of convergence and crucial fascination in all culture and among all classes of individuals. Waterfront has the advantages to recreate the image of the city, recapture the economic investment and attract people back to deserted downtowns.

Waterfronts are vibrant places by nature. As an edge environment, the overlap of different communities of users and dramatically different conditions make for enormous amounts of complexity and energy. In the non-human realm, waterfronts are the interface of the aquatic and the terrestrial, the site of complex intertidal communities, the point of release for wave action, and the vehicle for many dispersal patterns. As related to human history and use, waterfronts have a long history of changing types and levels of uses, and are now coming back into potentially thriving and layered public use. Once the site of first settlements and exploration, they have long served as transportation corridors and ports, hubs of trade, travel centers, recreation venues, and much, much more. Waterfronts have been extensively used by humans for their utility in travel, trade, recreation, and general enjoyment, and have also suffered cycles of abuse and neglect from these very use patterns.

2.7.3 Patterns of Waterfronts

Patterns of waterfronts are originated from a settlement to a city with a port. Further after city detachment to a decline of port and rediscovery of waterfront to bring public back to water and develop relics of post-industrial port into a living space for economic and public leisurement (fig, 2,7).

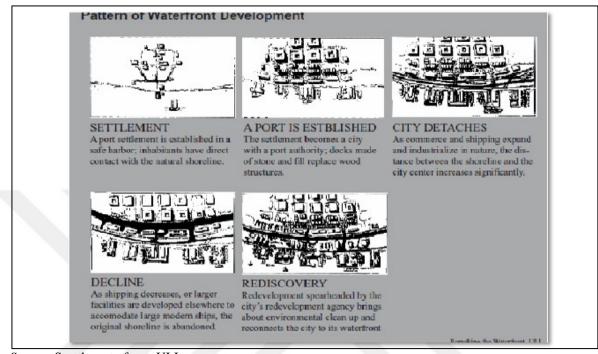


Figure 2.7: The pattern of Waterfront

Source: Seattle waterfront, ULI

2.7.4 Characteristics of Waterfront

Urban waterfront plans are the most complex and challenging plans of all the landscape plans. Generally, it consists of a greenbelt, architecture, landscape arrangement, and shorelines. A waterfront area is closely related to water, so it has different landscape characteristics from other places. The characteristics differ with regards to its physical location with relation to the city such as (grand promenade, waterfront stroll, Fiji way waterfront and others) but the standard features are listed below.

A) Promenades and gathering Areas

The promenades and gathering areas, which is the key and common element in waterfront design, has one of the most important roles of waterfront success. It connects all the facilities, water, and city to each other, so a well-designed promenade should keep the waterfront alive.

B) Pedestrian focused

The waterfront design approach should be pedestrian focused. Successful waterfronts have a more significant quality of pedestrian promenade, which covers facilities of general public such as sittings, cleanliness, lightening, paving and others such facilities for their comfort.

C) Water-city Interlink and Connectivity

The connectivity of promenades and interlink with each other throughout the waterfront shouldn't be disturbed. Also an availability of visual portals should be left to have a visual accessibility.

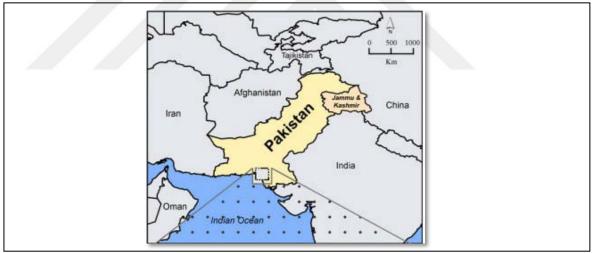


3. OVERVIEW OF PUBLIC OPEN SPACE IN KARACHI, PAKISTAN

Karachi, located in Sindh province is one of the largest city of Pakistan with a population of over 20 million (KSDP, 2020). Karachi is the most massive metropolitan center in Pakistan with an estimated population of over 20 million. Pakistan has only one seaport that is operating for trade and export which is located in Karachi. Therefore, Karachi is the city of generating highest revenue compared to other states, which is 15 percent of GDP. Due to the seaport of Karachi, Karachi is highly get benefitted from massive industrial setups. It has been claimed that the role of this city could lead the country towards the highest level of achievement and developments if there are proper peace, stability, and facilitation provided. *Source:* Google image

Figure 3.1: Pakistan in Middle East

Karachi has a population of more than 20 million due to which the city possess formation of



informal settlements and in the rise. According to development plan 2020, which mentioned the existence of squatter settlements within the city of approximately 700. Being a major and primary sea port of the country, Karachi seaport serves for shipping transportation and maritime hub of Pakistan.

3.1 GEOGRAPHICAL LOCATION

Karachi, as a recently reformed district, lays geographically in between 24°45' N to 25°37' N and 66° 42' E to 67° 34' E. It is situated 80 miles due west of Indus river mouth (fig.3.2). It is surrounded by the Dadu District in the North and Northeast and the Thatta District in the East, while in the South and Southwest by the Arabian Sea and in the Northwest.

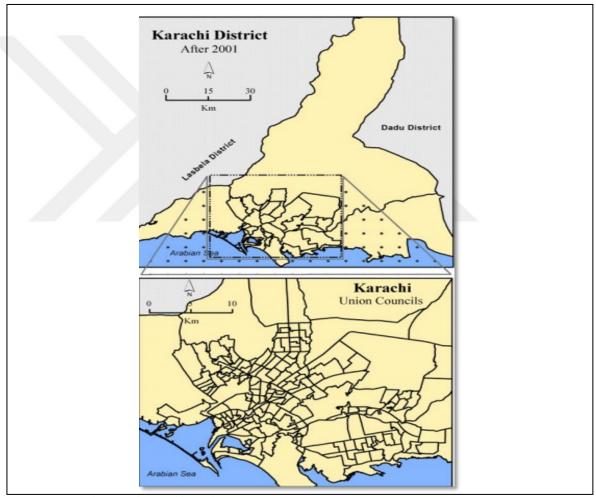


Figure 3.2: Karachi in Pakistan map

Source: Google image of Karachi, Pakistan

Karachi can be further divided into two categories: (i) hilly areas (ii) plain and coastal area. The hilly areas of Karachi lies on the north-west, which is known as Kirthar range and the height of the hills ranging from 150 meters to 250 meters. The plain and coastal regions are located at the south-east. Towards the south, the city is connected with the Arabian Sea, which makes coastline with the city. These coastal areas on the south-east are mainly composed of mud-flats, mangroves, sand backs which are intersected by a system of ramifying inlets and creeks (Pithawala et al, 1946). Three major rivers pass through Karachi which is Lyari, Malir, and Hub which further goes to the Lasbela limit.

3.2 HISTORICAL SITUATION

The known history of Karachi dates back to 500 BC. The terrorities of Karachi has been utilized and harbored since ancient times. Such as;

I) **The Greeks:** the Greeks were the first to come here. They used to call this port by the various names which include Krokola. It has been said that Alexander the great had resided here after his battle in Indus valley and after that, he started his journey to Babylon.

II) **The Arabs:** Muhammad bin Qasim when the name of Debal called crusade and laid foundation of Ummayid dynasty in 712 AD, Karachi.

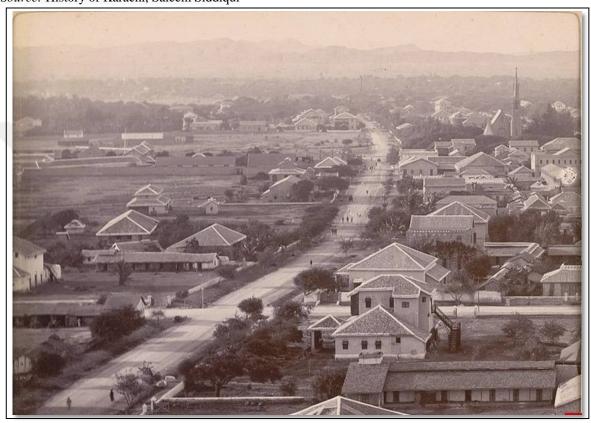
Amid 7th century, one of the Sufi saint and from the group of Prophet Muhammad (P.B.U.H), Abdullah Shah Ghazi landed here from Kufa for preaching of Islam in 760 AD. The shrine of Abdullah Shah Ghazi still exists at Clifton, Karachi and almost all of the public goes to visit his shrine and pray.

III) **The Mughals:** During Mughal period, Debal was fortified for the purpose to protect and prevent invasion attacks from Portuguese ships.

IV) **The Ottomans:** Syedi Ali Reis, one of the admirals of Sultan Suleman (the magnificent) he mentioned about debil and Manora land in his books in 1554. During the 15th century, Debal was attacked by Portuguese ships for the purpose to destroy the Ottoman ships that were anchored at Debal port.

From the earliest, the port was an integral part of the city. Therefore settlements stated to get settled there and became a village in 1720. This village was called by the name of Kolachi.

Figure 3.3: Karachi in 1700's *Source:* History of Karachi, Saleem Siddiqui



Karachi referred to history for its settlement that starts to begin in 1728-29 by Hindu fisherman and merchants, which were resided at the northern bank of Arabian Sea (GOP, 1981). For the reason to protect their town, Sindhi merchants imported guns from Muscat and Oman, for the reason to make a small fortification. The fortification was categorized into two passage portals with a door name of Meetha Darwaza and Kharra Darwaza. In 1742, a ship belonged to East India Company got shipwrecked along the coast of Karachi, so for the first time, its name was reported as Karachee in a document.

After the conquest of Karachi by British East India Company, the significance of Karachi got inscread. During that year military contoment has been made up which divided the city into two parts.

One for the "whites" which contained Frere hall, Sindh club, staff lines, masonic lodge and shops for whites at saddar bazar and empress market.

Secondly for the blacks were residing in the north-west part of town. The north-west part of the town was composed of three markets such as; Napier, bunder and old town, for dweller to shop.

Figure 3.4: Karachi in 1856,



Source: GOP, 1996

Karachi became a part of Bombay residency when the Napier left. The town began to sprawl over the other parts of town and now turned as a mega city with a population of over 20 million.

The British government has recognized the importance of Karachi. Therefore, they established cantonments for their military and developed a port for future transportation of trades and shipments. In 1899, Karachi became a global city of having a population almost 105,000 inhabitants. These inhabitants of Karachi include people from all religions and races.

By the end of 1914, Karachi became the biggest asset for the British government, as it was the biggest wheat and flour supplier region of their empire.

3.3 URBANIZATION

3.3.1 Historical Overview of Urbanization in Karachi (1843-2001)

The known recorded information of urbanization begins from the seventeenth century. In the seventeenth century, Karak Bunder was a little port on the Arabian Sea on the estuary of the Hub River, 40 km west of present-day Karachi. It was a travel point for the South Indian -Central Asian exchange. The estuary silted up because of substantial rains in 1728, and the harbor could never again be utilized. Accordingly, the traders of Karak Bunder chose to move their exercises to what is today known as Karachi. Exchange expanded in the vicinity of 1729 and 1839 given the silting up of Shah Bunder and Kiti Bunder (vital ports on the Indus) and the moving of their exercises to Karachi. In 1839, the British vanquished Karachi. They required a port for landing troops for their Afghan battles which were planned to keep the Russians from achieving the Arabian Sea. After the British success, Karachi extended quickly. The significant purpose of Karachi's development was that the British created lasting water system conspires in Punjab and Sindh (Karachi's hinterland) expanding rural agricultural production which was sent out through Karachi. The railroads were created connecting Karachi to its hinterland making the transportation of farming produce conceivable. Accordingly, by 1869, Karachi turned into the biggest exporter of wheat and cotton in India. The opening of the Suez Canal in 1869 made Karachi the primary port of call for ships coming to India from Europe. Amid the First World War Karachi turned into the



central station for British mediation. In Central Asia. Therefore, its cantonments extended.

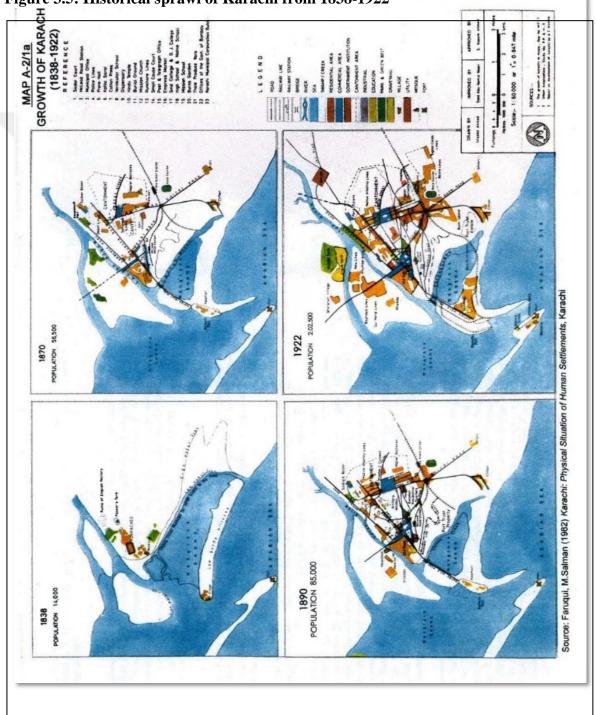


Figure 3.5: Historical sprawl of Karachi from 1838-1922

A) 1843-1947

From a population of only about 14,000 inhabitants in 1838, Karachi grew steadily over the next three-quarters of a century, reaching a population of 136,000 in 1901 and 244,000 in 1921 (fig.3.5, pg. 33).

It grew up with an average annual rate of 2.1 percent during 1921 to 1931, reaching 301,000 inhabitants. After separation from Bombay presidency in 1935, Sindh became a province and Karachi was titled with its capital. All of the official works of trade organization was moved from Bombay to Karachi. Due to which first industrial estate was established in Karachi. Right after partition from United India in 1947, Pakistan came into being, and Karachi became the capital of Pakistan.

B) 1947 – 1958:

Karachi's population increased by 161 percent. This was the result of the migration of 600,000 refugees from India. This migration completely changed Karachi, not only demographically, but also culturally and ethnically.

Table 3.1 summarizes the change. During this period migration from India continued. The refugees settled in squatter settlements on the city's periphery and within the city itself occupying open areas. Federal government offices were established along with foreign embassies. As a result, Karachi became a high-density compact city with a cosmopolitan culture. Many plans for developing a federal capital area adjacent to the city were developed

but could not be implemented due to political instability caused for the most part by leftwing student movements supported by the refugee population.

Table 3.1: Population growth of Karachi

Source: Dawn news, Census report, 1998

C) 1958 – 1968:

The armed force assumed control in 1958 and chose to move the capital to Islamabad. It additionally chose to move the refugee populace and other recent migrants from the squatter

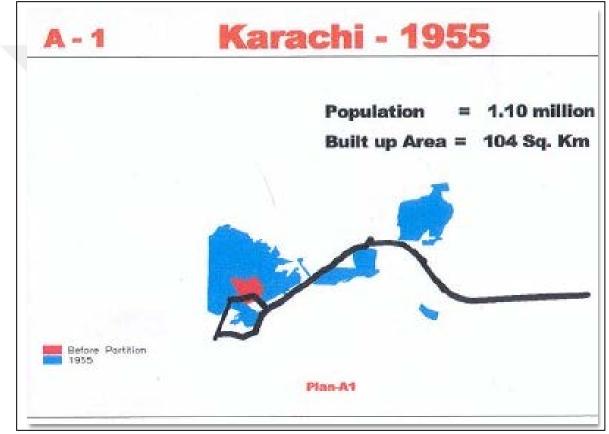
Year	Population	Increase/ Decrease Over Previous Census / Survey	No. of Years Between Surveys	Increase/ Decrease (%)	Average Annual Growth Rate (%)
1941	435,887	135,108	10	44.90	3.70
1951	1,137,667	701,780	10	161.00	11.50
1961	2,044,044	906,377	10	79.70	6.05
1972	3,606,746	1,562,702	11	76.50	5.00
1981	5,437,984	1,831,238	9	50.8	4.96
1998	9,802,134	4,540,422	17	86.29	3.52

settlements to two townships, Landhi-Korangi and New Karachi, both around 20 km from the downtown area. These two townships were a piece of the Greater Karachi Resettlement Plan arranged by Doxiades, which laid the reason for Karachi's future improvement. The two townships were supposed to settle industrial territories to give work to the refugees. In any case, this did not emerge, and subsequently, individuals needed to head out long separations to work at the port and downtown area. In this manner, Karachi's vehicle issues were made. To resolve this issue, the government took initiatives and decided to destroy squatter settlements and shift them to away from the city center. Amid this period, the administration presented Green Revolution advances and advanced industrialization.

Figure 3.6: Karachi Plan 1955

Source: ECIL, Arif Hassan, Karachi Plans 2006

Because of both these strategies, Karachi's populace expanded through urban country



movement which thusly expanded the number of inhabitants in the ¹ Katchi Abadis.

D) 1968 - 1978:

¹ Katchi Abadis : Squatter settlements

An initiative took into motion in 1974-85, the government decided to arrange the masterplan for Karachi. However, unfortunately, yet it could not be executed entirely aside from street systems and the mass water supply (fig.3.7). The explanation behind non-usage was the military takeover and political clash.

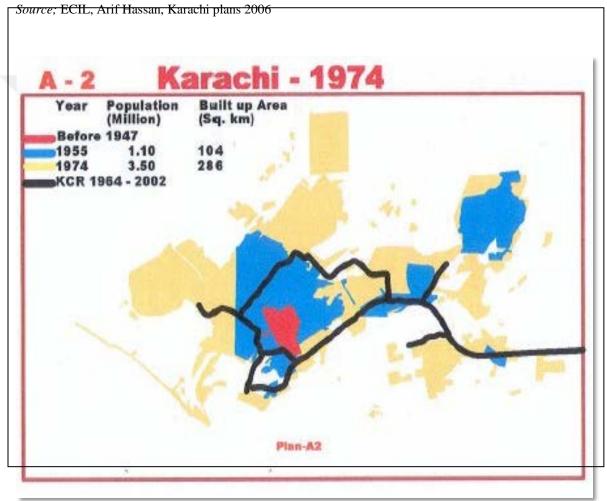


Figure 3.7: Urban sprawl and population of Karachi in 1974

E) 1978 – 1988:

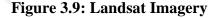
Due to the lack of responsibility and inability of administration, the city organization fell apart. During this duration, an ascent of an ethnic group of Mahajirs (refugees from India) came into leader ship by the name of Muthida Quami Movement (MQM). Similarly to the previous decade, once again a master plan for Karachi has been proposed, but unfortunately it had the similar fate to the previous one (fig: 3.8). It could not implement due to the law and order situation of the city. Amid this decade, "Islamisation" was additionally presented which brought about the shutting down of Karachi's dynamic nightlife, racecourse, bars, pool rooms and various films. This adversary affected Karachi's social and intellectual life.

Figure 3.8: Karachi Plan 1987

Karachi A - 3 Year Population **Built up Area** (Million) (Sq. km) Before 104 1955 1.10 286 1974 3.50 1987 461 .50 CR 1964 2002 Plan-A3

Source: ECIL, Arif Hassan, Karachi plans, 2006

F) 1988 – **2001:** From the 1970's, ethnic government issues and the MQM problems has ruled legislative issues within city prompting focused on strikes, target killings, road brutality and law agencies overabundance. Therefore, the industry moved to different parts of Pakistan and joblessness in Karachi expanded (fig.3.9). Amid this period globalization and auxiliary alteration negatively affected Karachi's activity advertise and brought about resistance. Since no new lodging plans or improvement extends on a sufficiently vast scale have been started, vagrancy has expanded thus has the development of katchi abadis and the congestion of inward city slums.





Source: Land Use Karachi Plan, 2001

3.3.2. Contemporary Urbanization in Karachi after 2001:

The population census that occurred after 1998 was in 2017, which shows a large number of population increased growth and migrations. The numbers of population drove from 9,856,318 in 1998 to 16,051,521 in 2017.

Population increases almost 62 percent in these two decades with increased figures of 6,195,203 (fig.3.10).

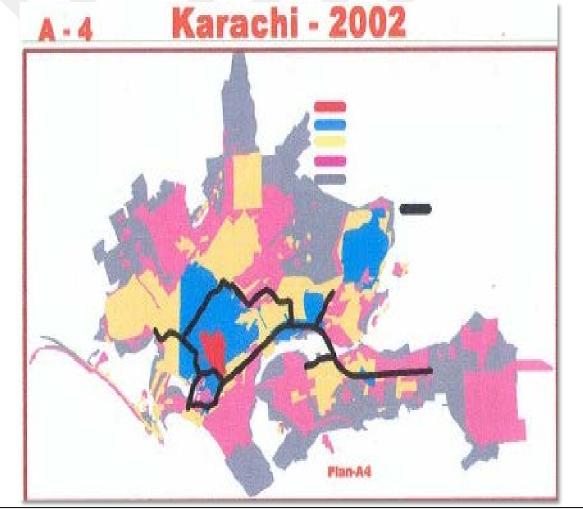


Figure 3.10: Population of Karachi- 2002

Source: ECIL, Arif Hassan, Karachi plans, 2006

Housing these population comes up with the cost of mass housing construction which makes the city too much densify to live in with the low quality of life. A large number of housing, apartments and the city became subject to developments.

3.4. CONTEMPORARY URBAN PROBLEMS IN KARACHI

The census from 2017 shows that huge amount of migration and population of almost 61 percent increase. Due to growing population, it is obvious that controlling huge amount of population comes up with more needs and problems. As a metropolitan city, the city always faces challenges. These challenges vary from time to time and got worse. These challenges consist of Energy Crisis, Water crisis, Sewage, Security, Poverty, Mass housing, Flaws in Law amendments, Land reclamation, Privatization, Social and cultural barriers.

The table below shows following enlisted problems, which are subcategorized and held responsible for their affection on urban area and public open spaces in Karachi.

IMPACT OF: NEO- LIBERALIZATION	IMPACT OF: URABN STABILITY ORDER		
/URBAN DEVELOPMENT			
1) GENTRIFICATION	1) LAW AMENDMENTS		
2) PRIVATIZATION	2) FEAR & TERROR		
3) PUBLIC DESCRIMINATION	3) ENCOURAGEMENT OF PRIVATIZED OPEN SPACES		
4) LAND RECLAMATION	4) NO ISTITUATION		
5) SOCIAL AND CULTURAL BARRIERS	5) EXTRA SECURITY MEASUREMENTS		

Table 3.2: Factors enlistment that affects Public open space in Karachi

6) QUALITY DIFFRENCES

Source: Researcher

3.4.1 Impact of Neo-Liberalization/ Urban Development

3.4.1.1 Land Reclamation in Karachi

The term land reclamation means "Land reclamation is the gain of land from the sea, or wetlands, or other water bodies, and restoration of productivity or use to lands that have been degraded by human activities or impaired by natural phenomena." Land reclamation has been extended to the construction of whole new islands; a phenomenon that is particularly common in Asia and the Middle East and is recognized as a global conservation issue.

Karachi is also subjected to land reclamation, a huge amount of land has been reclaimed in order to accommodate the giant increasing population (fig.3.13). In Karachi, various sites have been subjected to land reclamation and inviting private entities to get their economic benefits from it.

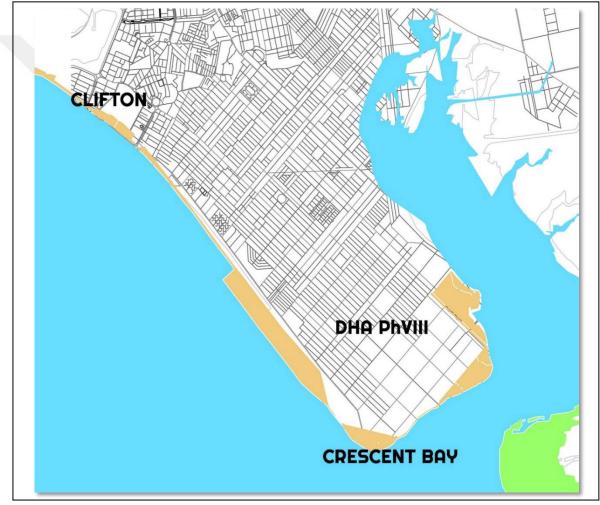
Figure 3.13: Karachi Coastline



Source: Dawn news - July 11, 2014, Coastline which stretches to over 130 km, faces over environmental degradation in the name of development

3.4.1.2 Areas Subject To Reclamation in Karachi

The areas selected as reclaimed sample for this research Public Open Space in Karachi waterfront are Crescent Bay, Clifton, DHA sea view (fig 3.14). Reclamation of these lands has a direct impact on transformation of land use types and nature of publicness in public open spaces. These areas are on the coastline of Karachi and have potential land value for economic benefits.





Source: Redrawn by researcher

A) Crescent Bay

The coastline of Karachi lies on the south-east end, comprises many touristic, recreational, housing, shopping malls and others. Crescent Bay is also one of them, which lies on the south-east end of Karachi near to Defense housing authority. Crescent bay was once the recreational spot for public and tourist. After initiating the mega residential gated housing projects, the land has been gentrified to a special group of people. The changes can be seen in the figure 3.15, describing the changes occurred and reclaimed land from the sea.

Figure 3.35: Before and after google image of Crescent Bay



Source: Google image, 2001-2018

DHA and Emaar Giga International had signed a memorandum of understanding on May 20, 2004, to construct 46 towers in three 'uniquely designed' bays. According to Emaar Pakistan's website, they are going to build each of these three bays with features including; residential, offices, malls, parks, plazas, and waterfront promenade to encourage touristic point of view and life style of individuals.

Figure 3.16: Proposed Emaar Project for Crescent Bay



Source: DHA webpage

B) Clifton

Clifton is located near Saddar in Karachi. Historically, Clifton was one the most important sites due to public cultural beliefs and as a refreshment spot in the city, (fig.3.17). It is here where one will find the most popular beach in the country as well as some of the richest residential and shopping areas. This part of Karachi also been subjected to land reclamation which devastating public asset into a profitable land for economic profits. Several actors are active in this part of areas such as Karachi Port Trust and DHA (Defense Housing Authority) for its development, privatization and initiating a new project to change the city image as well quality standards of this area.

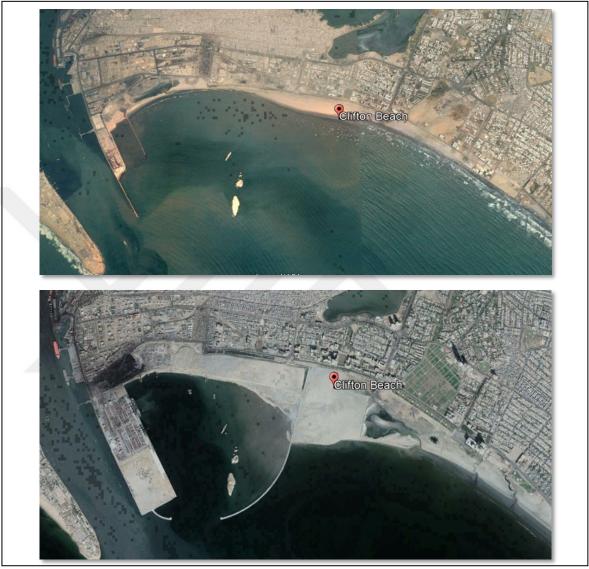


Figure 3.17: Clifton after reclamation, before and after image

Source: Google Image - 2002-18

A multi-billion rupees commercial development project was initiated at the cost of the Clifton beach owing to which more than 50 percent of the beach has been eliminated. Land reclamation is done all over the world but after proper studies that determine sea or ocean behavior.

C) DHA (Defence Housing Authority)

Defence Housing Authority Karachi as the name implies, primarily came into being for the welfare of the serving and retired officers of the Armed Forces of Pakistan. The Housing Society, which made a humble beginning with a mere 76.2 acres of land, has come a long way. This mostly barren land at that time was developed through meticulous master planning, provision of enviable civic facilities and creating quality living environments for its residents. DHA is a first-choice residential area for the affluent and a safe haven for the investors. With the passage of time, DHA becomes an institute for the developmental body in Karachi also spreading towards all over the country.



Figure 3.48: DHA land reclamation-1947 to 2009

Source: City by Sea, YouTube

Figure 3.19: DHA Land reclamation behind Creek club at Clifton



Source: City by sea, YouTube

The impact of these developmental bodies' effect four types of groups which includes, natural environment, fisher community, public, and landowners. These land along the sea which is subjected to development are home to several living habitats and vegetation. Vegetation includes a variety of trees in mangroves which helps these areas to save them from flood and storm. According to Abdul Ghani (local resident of Karachi) who claims that these mangroves are a silent soldier who helps them to protect from storms and flood. Due to these reclamation project for development, mangroves are subjected to cut off rapidly which has a negative effect on the environment also putting in danger lives of inhabitants and other living creatures.

3.4.1.3 Privatization

After completion of these projects, several groups of people is going to be affected from them. Fisher community is one of them, several villages of fisher community got gentrified as a result of land reclamation and neoliberal policies, see fig 3.20. Fisher community is those people who are below the line of living standards whose living is totally based on the sea. These projects will limit them to a certain area and will push them back from the coastal area.

As this coastal area would be used for only high income group of national and foreign peoples.



Figure 3.20: Gentrification of fisher community from coastal area near DHA

Source: Arif Hassan Paper: Gentrification of South Asia, 24 March 2012

3.4.1.4 Social and Cultural Barriers

Karachi Sea is not only use for recreation or source of living for fishing community but it also plays an important role in the social and cultural aspect of inhabitants of Karachi. Karachi is home to several ethnic groups of peoples comprises of Muslim, Hindu, Christians, and others. They had a strong bond with the sea for their cultural aspects as well. Historically there has been a ritual of feeding meat to birds to fulfill their wishes after visiting from the shrine of Abdul Shah Ghazi, (fig.3.21).

One of the most popular urban myths of Karachi is related to what is perhaps its largest Sufi shrine: the shrine of Abdullah Shah Ghazi. Built on the sandy shores of the city almost 10 centuries ago (as the final resting place of an obscure Sufi saint called Abdullah Shah Ghazi), for a long time the saint's many admirers have believed that the reason cyclones usually miss hitting Karachi is squarely due to 'the mystical power and presence of Shah Ghazi's spirit that resides within the shrine' (fig 3.22).



Figure 3.25: Man feeding meat to birds as ritual

Source: Google image



Figure 3.26: Shrine of Sufi Saint Abdul Shah Ghazi in Clifton Karachi

Source: Wikipedia, Abdullah Shah Ghazi

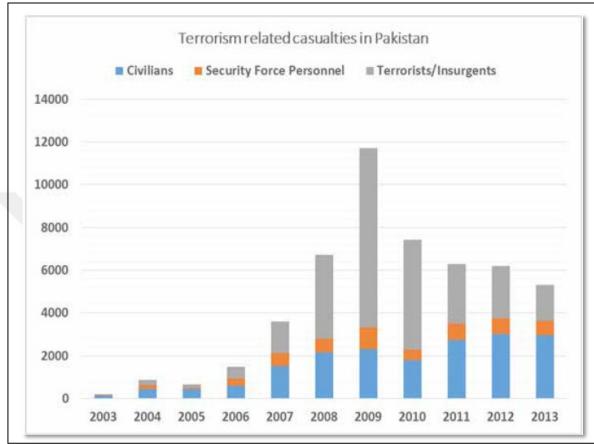
After land reclamation in Clifton, Karachi, the connection between public and sea to perform their rituals and socializing at the same got dismantled. But the ritual still exists, people of different ethnic groups goes to the bridge nearby to perform their ritual. (Interview with Arif Hassan).

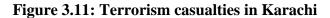
3.4.2 Impact Of Urban Stability Order

3.4.2.1 Security and physical barriers

The problem of security threat arose since the times of migrations occurred due to war in neighboring countries such as refugees from Afghanistan and immigrants from East Pakistan (today's Bangladesh). The security situation of city and terror attacks on public created an environment of fear among public. These break downs of security flaws and frequent attacks on public safety became a core issue for all of the stake holders. During last fifteen years, the attacks targeted each and every corner of the city and places which includes places of worships as well.

The transportation of armies mercenary that is fighting in Afghanistan is through Karachi port. Therefore, ethnic and certain instability starting to begin, in form of terrorist attacks to stop the transportation of NATO army mercenary. Due to these effects of being an ally to NATO army, Karachi started to be target of terrorist attacks. In a result of which dozens of individuals had lost their lives whereas, left a lot of peoples severely or partially wounded. Also these attacks did a lot of damages to the public and governmental assets (fig.3.11).





Due to the attacks and for their own safety, people started to take measures to ensure their safety by taking various mechanisms. Such as people started to hire private security guards for their residences or offices, installation of barriers and blockage on streets has been introduced for their safety.

Source: Report of tribune news, 2014

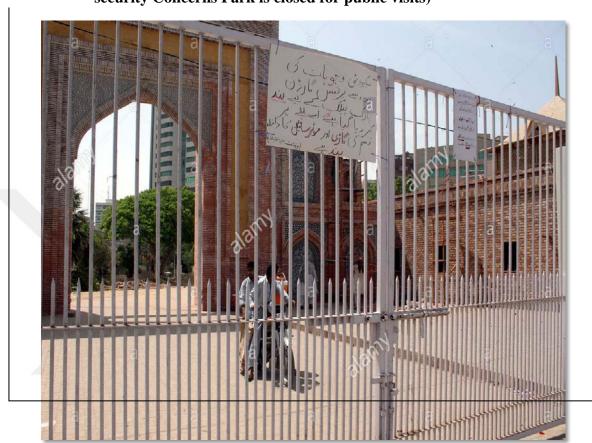


Figure 3.12: Burns Garden closes for security concern in Karachi, (Due to security Concerns Park is closed for public visits)

Installed in order to form a secured a small gated community (fig.3.12). These implications have changed the whole status of all spaces in functional and jurisdictional manner. These establishments for security estimation introduced in every open space. Physical barriers, for example, wall, fences and vehicle boundaries go about as the furthest layer of security. They serve to forestall, or possibly defer assaults and furthermore go about like a mental obstacle by characterizing the edge of the office and influencing interruptions to appear to be more troublesome. Tall fencing finished with security razor wire, or metal spikes are frequently emplaced on the border of a property, for the most part with some sort of signage that cautions individuals not to endeavor to enter.

Source: Report of Dawn news, Ali, 2014

3.4.2.2 Law Amendments

Every state has a responsibility to keep and protect interests for sake of their public. For that state makes laws in order to keep these favorable interests for their public under control. Similar is the case with Pakistan, Karachi- Nemours amount of laws has been introduced and implemented in their constitution. But due to lack of check and balance or institute to control these laws implemented over developmental or other profitable influential sectors.

Constitution of Pakistan-1973, setups a set of laws for sake of their public interests, such as Article-38 of Constitution- which states that "Promotion of social and economic well-being of the people:

Provide for all citizens, within the available resources of the country, facilities for work and adequate livelihood with reasonable rest and leisure.

Several others laws in Constitution of Pakistan-1973 ranging from Article 8 to 28, discuss fundamental rights of the public. As from the constitution, which is clear for the availability of these laws for sake of public interests. But implementation of these laws from the governmental institutes is lacking because of which urban inhabitants has been dismantled to maintain their social life with reasonable rest and leisure.

Furthermore, with regard to implementation of laws and regulations, an example of which can be seen in figure 3.23, in which a strategic development plan that has been introduced in 1990 for the transformation of coastal region hasn't been implemented. Rather than that some parts of that region have been transformed into commercial and private properties.

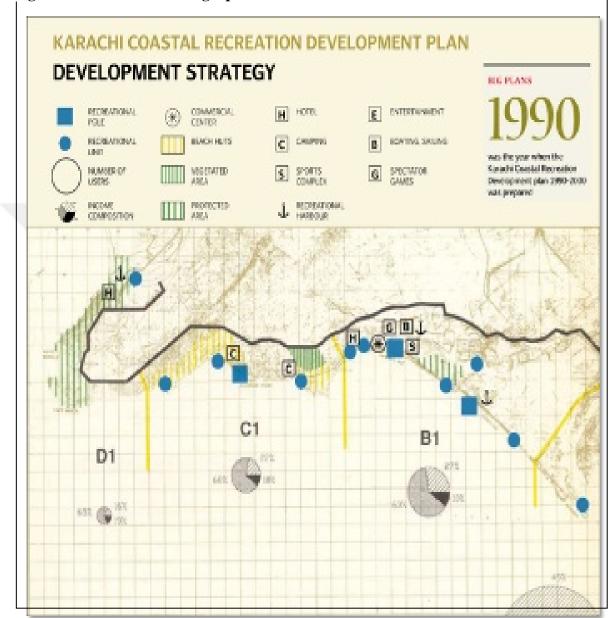


Figure 3.23: Karachi Strategic plan 1990

Source: Arif Hassan, Karachi Analysis

Recent years witness's violation of these laws, protests and complaint files regarding public space subjected along coastlines are filed by fisher's community, civic authorities, environmental institutes and many more (fig.3.24).

Figure 3.24: Occupy Karachi coastline



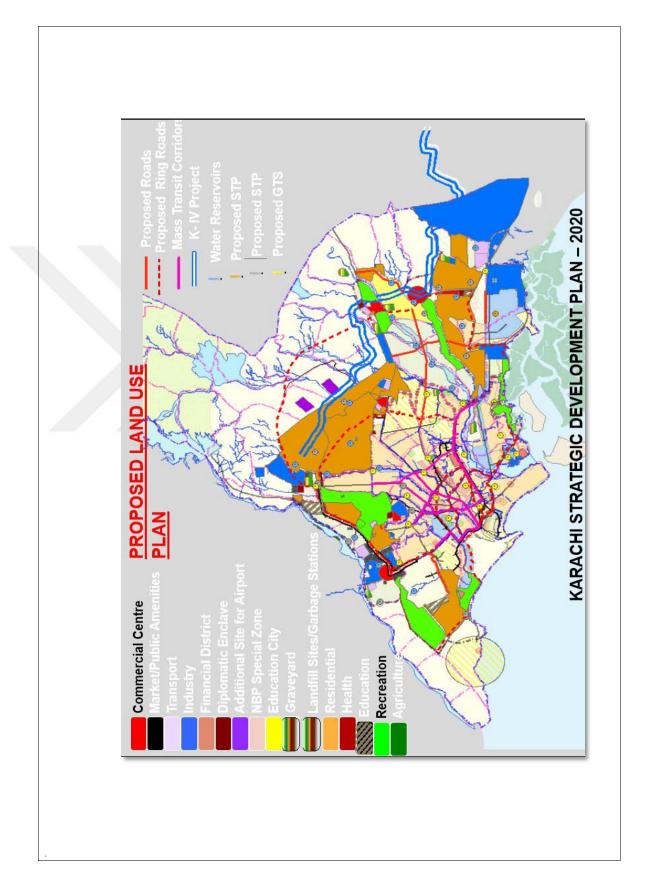
Source: Fishermen protest DHA barring parts of the coast, The Express Tribune- 1/11/11

3.5 KARACHI STRATEGIC PLAN 2020

Karachi Strategic Development Plan 2020, the recently prepared planning development document for upcoming future developments (Table 3.1). Whereas the subject of this study which is public open space are here to subject in Karachi strategic plan (fig.3.25).







Source: KSDP, 2020

The sea coast is a place for enjoyment and spend leisure time to the people. The coast contains various beaches such as Clifton, Hawkes Bay, and Sands pit together, with the attractive scenery views which are visited mostly on weekends and holidays by public. People visits these places mostly but with their owned hired or personal transportation. Because of the lack of access to these spaces.

Other parts of the coastal beaches such as, Sands pit and Hawkes bay remain abundant and undeveloped. The entire crest of the sandbar are composed of private huts. The general public mostly visiting the beaches on weekends and holidays does not enjoy any essential facility like shade, public toilets, and amusement shops. Swimming is rather dangerous; accidents of drowning, particularly at Sands pit having a sharp seaside gradient, have occurred with increasing frequency.

Land Use	Urbanised Area 2006 (acres)	% of Total Urbanised Area	KSDP 2020 Plan Area (acres)	% of Total Plan Area
Formal Residential	35,206	27.0%	69,369	12.0%
Informal Residential	10,558	8.1%	10,998	1.9%
Goth (villages = residential)	2,043	1.6%	13,126	2.3%
Commercial	2,921	2.2%	3,386	0.6%
Health	685	0.5%	729	0.1%
Educational	3,320	2.6%	3,495	0.6%
Government	3,036	2.3%	69,712	12.1%
Other Institutional	1,218	0.9%	1,450	0.3%
Industries	9,285	7.1%	26,919	4.7%
Cottage Industries	28	0.0%	28	0.0%
Transport	723	0.6%	4,296	0.7%
Warehouses	563	0.4%	2,670	0.5%
Mining	166	0.1%	167	0.0%
Vacant Land	9,541	7.3%	216,198	37.5%
Open Space	13,439	10.6%	26,655	4.6%
Agriculture	7,296	5.6%	56,256	9.8%
Water	2,392	1.8%	11,353	2.0%
Road Space	23,089	17.7%	54,036	9.4%
Other Land Uses	4,660	3.6%	5,003	0.9%
Total	130,169	100.00%	575,845	100.00%

Table 3.1:	Open s	pace pl	an for	Karachi,	2020

Source: KSDP 2020

3.5.1 Conclusion from the Strategic development plan 2020

Karachi development authority claimed to have developed the Clifton area for amusement and recreational purposes. But what we see as KDA (Karachi Development Authority) along with Defense housing authority developed certain spaces within these places for specified group of peoples.

In KSDP (Karachi Strategic Development Plan, 2020) which is appreciable for their division of land uses. In this hand book of strategic plan, open spaces have been left with significant amount (Table, 3.1). These development plans had already been proposed before in 1990's and in start of 2000's but it couldn't been implemented. As conclusion for their non-implications we learned from past years of period, two factors were found responsible;

i) Urban stability order

ii) No institution for implementations.

If government wasn't able to control and manage these two factors, so this plan will also fails as before that were proposed in 1990's and 2000's.

3.6 IMPACT ON PUBLIC OPEN SPACE IN KARACHI (A SPECIAL CASE OF WATERFRONT)

Public open spaces as a whole in Karachi can be found lesser in number due to the developmental factors and contemporary physical situation of Karachi, (Fig 3.26).

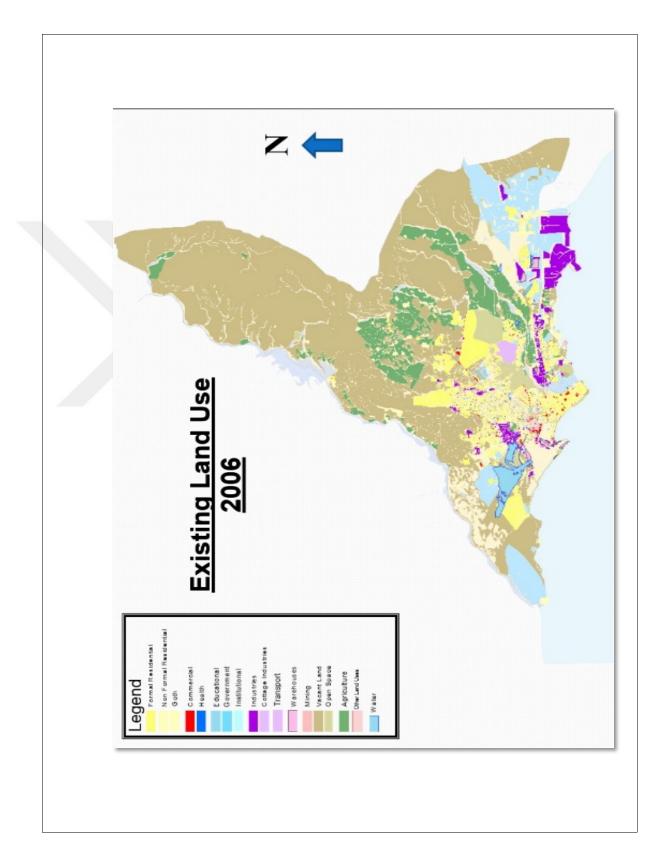


Figure 3.26: Land Use Plan 2006

Source: KSDP 2020

Land Use	Urbanised Area 2006 (acres)	% of Total Urbanised Area
Formal Residential	35,206	27.0%
Informal Residential	10,558	8.1%
Goth (villages = residential)	2,043	1.6%
Commercial	2,921	2.2%
Health	685	0.5%
Educational	3,320	2.6%
Government	3,036	2.3%
Other Institutional	1,218	0.9%
Industries	9,285	7.1%
Cottage Industries	28	0.0%
Transport	723	0.6%
Warehouses	563	0.4%
Mining	166	0.1%
Vacant Land	9,541	7.3%
Open Space	13,439	10.6%
Agriculture	7,296	5.6%
Water	2,392	1.8%
Road Space	23,089	17.7%
Other Land Uses	4,660	3.6%
Total	130,169	100.00%

Table 2.3: Land Use plan 2006, Karachi

Source: KSDP 2020

The total area of 10 percent of the area has been left for recreational and social purpose but which was later used for the private commercial purpose as shown in table 3.3.

Public spaces due to security and safety issues, land reclamation, urbanization and neo-liberal policies have led the coastline of Karachi segregated into two type of public space, public and privatized.

The entire coastline of Karachi at different sites are subjected to development for public interests as well for future needs of urban inhabitants with public and private entities. Private and public entity is of different nature to each other with regard to accessibility. Limited access after privatization creates discrimination of some part of the public.

The idea of these two public spaces is always subjected to opposition to each other by expertise. Some are in favor of support of privatization and some opposing the idea depending on their circumstances and ideology. Many studies show the degradation of publicness due to privatization while some show the impact of privatization on the quality of public space. Which has led, this study to analyze quality evaluation of public open spaces on Karachi waterfront? How the neo-liberal policies and urban stability order do affect these public open space?

4. THE STUDY AREA, STUDY AND RESULTS

4.1 KARACHI PUBLIC AND PRIVATELY OWNED OPEN SPACE

The selected scope of the area for this study lies along the Clifton and Defense Housing Authority (fig, 4.1). The reason for selection of this area is being a center of attraction for all of the urban inhabitants, tourists, and lies along the waterfront, therefore it is a favorite area for individuals to get spend their leisure time on the waterfront or in shopping. Another reason for selection of this area is due to availability of both nature of open spaces (Public and Private), it's historically and culturally importance which were destroyed due to subjected development and privatization.

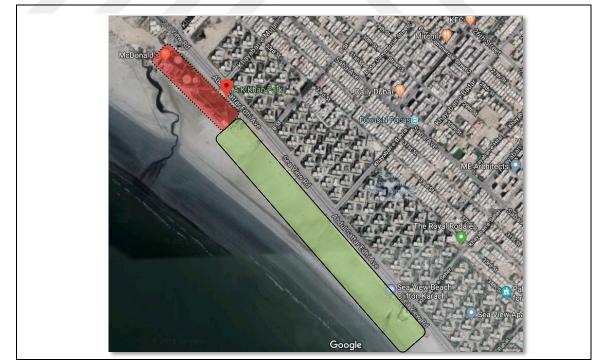


Figure 4.1: Google map image 2018, Karachi Sea view Clifton

Source: Google image 2018

Pr

Privately Owned open Space

Public open Space

4.2 PRIVATELY OWNED OPEN SPACE (AK KHAN PARK)

Privately owned open spaces are those spaces which have limited accessibility, controlled ownership and specific group of peoples. As discussed before, Privatization of public open space can be in the form of buildings such as shopping malls, coffee houses, festival marketplaces, fitness centers, themed historical destination, juice bars, pay-for-playground and the like (fig, 4.2).

Figure 4.2: Privately Owned Open Space, Clifton



Source: Google map 2018

This privately owned open space lies next to public open space on Karachi waterfront near Defense housing authority. The area for privately owned public open space composed of AK Khan Park, MC Donald's and Burger King.

4.2.1 AK Khan Park

AK Khan Park is named for a famous horticulturist Abdul Karim Khan. In recognition of his outstanding achievements, he was honored with the pride of performance award in 1999 and later the Sitara-i-Imtiaz as well as titles such as 'Baba-i-Baghbani Pakistan' (father of horticulture in Pakistan) and 'Mr. Horticulture in Pakistan'.

AK Khan Park consists of the parking lot, indoor and outdoor sitting areas, fountains and café. Furthermore, the park contains Nishan-i-Pakistan (monument), which was founded in memory of national heroes of Pakistan and contains the largest flagship of Pakistan (fig.4.3, 4.4).



Figure 4.3: The entrance of AK Khan Park

Source: Researcher

The AK Khan Park is a common ground for seasonal flowers, social and political exhibitions. Outer boundaries of the park are covered with low height wall with a fence.

In regard to accessibility, the park has limited physical and visual accessibility with a limited specific group of people, usually for families only. Park is privately guarded with security guards, high fenced gate with checkpoints.



Figure 4.4: Inner view of AK Khan Park, on Left MC Donald's

Source: Researcher

4.2.2 MC Donald's Karachi Sea View

Mc Donald's sea view Karachi is also a part of AK Khan Park lies to the right end of Clifton Karachi waterfront. It consists of indoor and outdoor sitting area for dining, parking lot, entertainment area and having scenery view of the sea. There have been concerns by civil authorities that allotment of the area for Mc Donald's in AK Khan Park is under premises of water-city boundaries (fig, 4.5). The Supreme Court of Karachi ordered that there will be no construction within 100 meters from the sea. Mc Donald's is violating what ordered by

Supreme Court of Karachi, Pakistan and is being constructed within boundaries of the sea. However, accessibility to the Mc Donald's is being guarded at a checkpoint from the road and is limited to people only for dining or take away.



Figure 4.5: Mc Donald's sea view Karachi, Pakistan

Source:https://www.tripadvisor.com/Attraction_Review-g295414-d6158802-Reviews-Seaview_Park-

Karachi_Sindh_Province.html

4.2.3 Burger King Karachi Sea View

Burger King is also part of AK Khan Park, lies at the front of the road. It consists of indoor and outdoor dining areas, parking lot and outdoor sitting area (fig, 4.6). It has greater accessibility without any obstruction of checkpoint but guarded by private security guards, and specific people only for dining are allowed.

Figure 4.6: Burger King Karachi Sea view

Source: Google image



4.3 PUBLIC OPEN SPACE (SEA VIEW KARACHI)

Public open spaces are those outdoor spaces which are open and accessible for all public without any obstruction. Where they can spend their leisure or social time. In this thesis the public open space which is subjected to study lies next to AK Khan Park, which has been discussed above in privately owned open space on the waterfront (fig, 4.7). Public open space on Karachi waterfront is named as sea view. An open accessible sandy area that links sea to the city, where people come and spend their time for social and leisure. Sea view has greater physical and visual accessibility. From the road, it is connected with pedestrian promenade, on which after certain span a tuck shop has been made. There are certainly other activities going on sea view, such as horse riding, camel riding, and motor riding, small vendors selling food or spices and long parking lot on the service road to sea view (fig, 4.8, 4.9).





Source: Google image, 2018

Figure 4.8: Images of Sea view



Source: Researcher

4.3 COMPARATIVE ASSESSMENT

The previous sections discuss the overview of Karachi, its historical to contemporary spatial transformation, key factors of problems and developments. These came up with consequences of segregation of public spaces. The case further explored where Karachi focusing on public open (Sea View) and privately owned public open space (AK Khan Park) on Karachi waterfront near Clifton and Defense phase 8 respectively. The main reason here is to demonstrate the similarities and differences in both public space types on Karachi waterfront in an attempt to understand the reasons behind the successful public space of either space on the waterfront.

4.4 ANALYSIS OF SELECTED PUBLIC SPACES WITH RESPECT TO WATERFRONT CHARACTERISTICS

The selected urban open spaces for this study both private and public lies on the waterfront of Karachi coastline, for the reason there is a need to understand the current physical condition and design precautions as desirable for waterfront design on Karachi waterfront, (Table, 4.1).

4.4.1 Comparative Analysis of both Open Spaces with regards to characteristics of Waterfront design

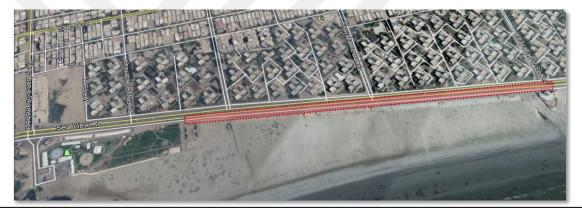
Characteristic	Privately owned Open	Public Open Space
S	Space	Sea View
	AK Khan Park/MC/BK	
Promenades	1 1	hat connects water-city is not ch other. Also at some point
Pedestrian	of the pedestrian is given	with facilitation shop on disturbing public flow. See
Gathering Areas	Sufficient Areas provided for social interaction with shade and quality	No Proper areas provided with any public comfort
Pedestrian Focused	Sufficient spaces provided	None available

Table 4.1: Analysis of Open spaces With regard to characteristics of waterfront

Facilitation	Facilitations are provided in an adequate quantity such as a washroom, water for cleaning and drink and furniture for sitting with shades	None provided, one has to buy water to clean for cleaning and drinking purposes see fig, 4.11
Water-city Interlink and Connectivity	developmental projects hap	o be interrupted due to pening along the waterfront ocial and cultural barriers for

Source: Researcher





Source: Google Image, Karachi whereas the red color presents the Kiosks installed in between pedestrian path at several intervals which interrupts public flow

Figure 4.10: Image of Kiosk installed on Pedestrian Promenade *Source:* DHA webpage

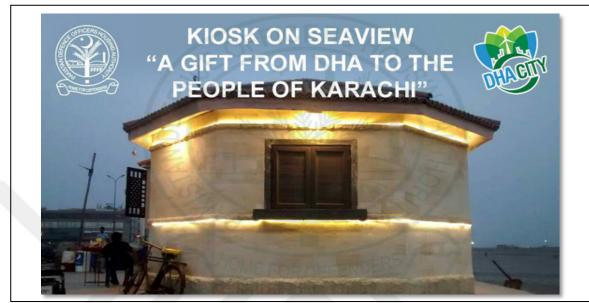


Figure 4.11: Water Selling for cleaning, Costs up to 0.20\$ per bottle



Source: Researcher

4.5 ANALYSIS OF SELECTED PUBLIC OPEN SPACES IN KARACHI WITH RESPECT TO CHARACTERISTICS OF PUBLIC SPACES

These selected public spaces (Privately owned open space and Public open space) which lies on the coastline of Clifton, Karachi has been subjected to comparative analysis concerning characteristics of public space. To analyze the quality of these spaces for user's satisfaction. The characteristics of public space have been described in chapter 2 (Literature Review) which are; social, comfort, accessibility and activity. For the purpose to analyze these public open spaces, a survey has been conducted with a survey form. The questionnaire was formed by using characteristics of public open space. 10-point type of Likert scales was used: satisfaction scale was used to allow respondents to indicate their satisfaction level with the quality of some of the environmental features in the open space. A random sampling strategy was adopted, and the questionnaire was administered on site. The sample was as wideranging as possible, varied in age and gender, and restricted to Karachi residents. A total number of sixty participants has participated which includes the general public, local inhabitants, students, professional and academies, etc.

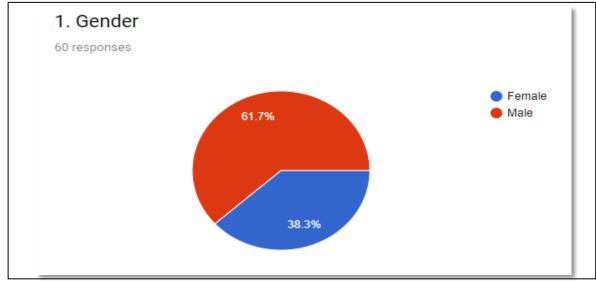


Figure 4.12: Gender participants in both open spaces

Source: Researcher

From the survey for this study having participants of sixty people, as shown in figure 4.12. Which shows these spaces for male dominant places where male gender are found majority in number such as 61.7 percent whereas 38.3 percent are females. This variation for usage of these spaces are male dominant which are due to lack of spaces, privacy and cultural aspect for female gender. Furthermore, age group of 18-25 are seems more to be participatory and users as compare to middle age group which ranges from 25-40. A decline can be seen in older age groups which are from 40 and above, one of the reason for their decline in the usage of these open spaces are because of no facilitation and age oriented spaces.

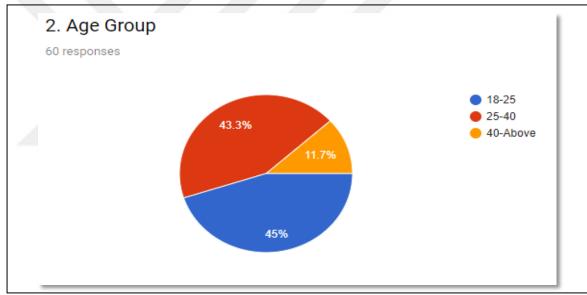


Figure 4.13: Age wise participants in open spaces

Source: Researcher

Accessibility is the major essence of any open space type. According to several authors such as carr et al. which suggests the accessibility should be available to all society without any barrier or limitation. In order to find the true essence for public in these open spaces, survey contained questions regarding to limitations of both open spaces and rank their quality of accessibility according to their experiences.

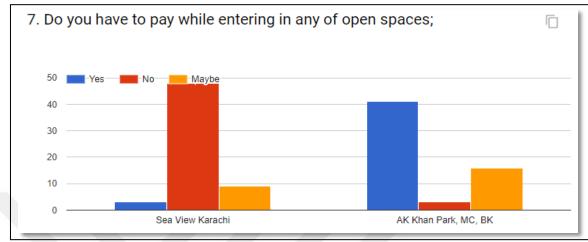
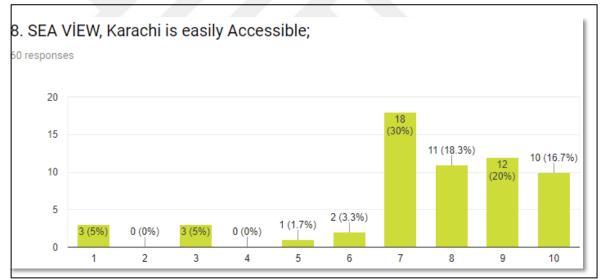


Figure 4.14: Comparative accessibility of both (public & private) open spaces

Source: Researcher





Source: Researcher

The results show the restrictions that occurs in the form of paid accessibility in privately owned open space (AK Khan Park) due to which public open space has to be considered truly public. Along with this aspect of being truly public, it has more accessibility points as compared to privately owned open spaces (fig.4.15).

The comfortability factor of open spaces can be seen less in public open space as compare to the privately owned open space. The reasons for their lesser in comfortability quality of public open space is due to cleanliness, places to sit, security and pedestrian oriented spaces.

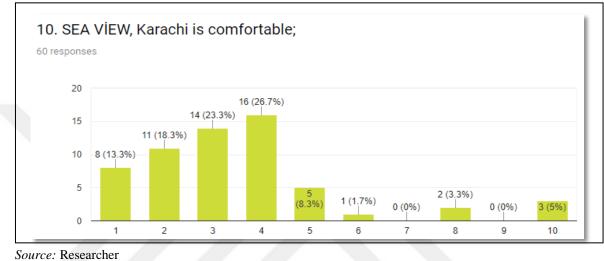
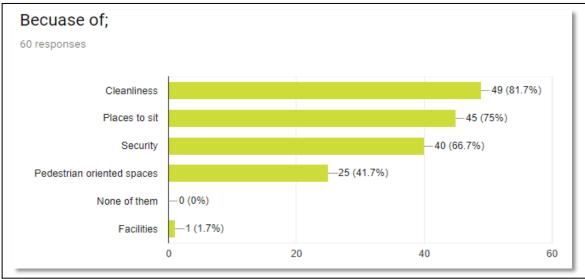


Figure 4.16: Quality ranking of comfortability in public open space (Sea View)

Figure 4.17: Factors causing discomfortability in public open space (Sea View)



Source: Researcher

Open spaces are a platform for performance of social interaction and activities. Therefore, we can analyze the characteristics of socialization in open spaces both in public and privately owned open space.

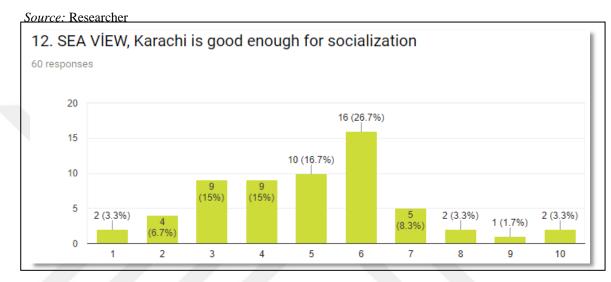


Figure 4.18: Socialization quality in public open space (Sea View)

The result shows, the privately owned open spaces are more socializable as compared to public open space. These differences of decrease of socialization quality in public open space (Sea View) are due to lack of suitable for meeting with friends or family, eligibility of people in group, mixture of ethnic and age group.

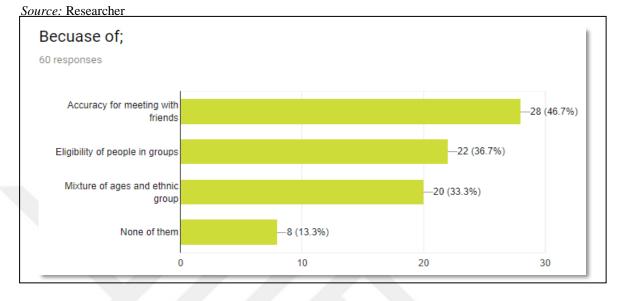
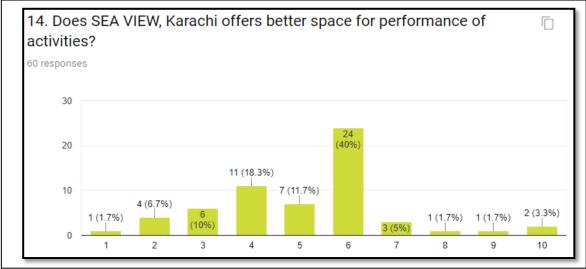


Figure 4.19: Factor influencing Socialization quality in public open space (Sea View)

Result of activities characteristic in public open space shows the lowest value as compare to privately owned open space. Which means the public open space (Sea View) is the least activity providing platform for public.

Figure 4.20: Activity quality in public open space (Sea View)



Source: Researcher

Due to the inability of performing activities such as active recreation, passive recreation, spaces by gender and children's makes public open space negligence or abundance.

Characteristics		pen Space View)	Sp (AK Khan	wned Open ace Park, MC, K)
	Mean	S.D	Mean	S.D
Accessibility	7.05	1.73	6.68	1.64
Comfort	4.08	1.75	6.81	1.79
Socialization	7.26	0.99	7.52	0.99
Activities	6.96	1.51	7.8	1.19
Total Quality Score	6.33	0.30	7.20	1.40

Table 4.2: Comparative analysis of quality Evaluation Statistics of both open spaces

Source: Researcher

Descriptive statistics that shows the quality of public open space and privately owned public open space in Karachi are presented in Table 4.2. Whereas the lowest mean value found in privately owned open space (AK Khan Park, BK, MC) and highest was found in public open space (Sea View) for accessibility. Which proves the carr.et al statement regarding accessibility factor for public space, which states no limitation for accessibility in public open space and limited accessibility for privately owned space. Accordingly, the lowest mean value of comfort, socialization, and activities was found in open public space (Sea View) and highest were found privately owned public space. According to Gehl's in his book "Life between buildings" where he stated, activities are in relation to quality of space where the quality is greater, the more activities can be performed there. An example of his statement can be noticed here, where all of the three activities are highly performable in privately owned open space due to its quality of space.

4.5.1 User's needs concern and attitude towards both spaces

Several concerns have come into consideration after interviewing in open space whereas privately owned space has such problem with accessibility. The user's concerns lies with regard to cleanliness, safety, physical quality and poor maintenance in Public open space. The results of the interviews are summarized in the table below;

	USER'S	CONCERNS	
Cleanliness	Safety	Physical Quality	Poor
			Maintenance
Horse waste	No surveillance	No walkways	Walkways
Sewage water	No lightning	Lack of benches	Space for shop
			vendors
Litter	Unsafe at all	No water facilitation	
		for cleaning/washing	
Broken bottles		No washroom facility	
and glass			
		No shades for sitting	

 Table 4.3: User's concern with regard to public open space (Sea View)

Source: Researcher

The table 4.3, shows the results of the survey. In which sixty people participated and mostly, they were concerned about cleanliness of the space which was highest among all of the concerns approximately 71 percent. Secondly, places to sit around which was 50 percent due there isn't any place for sitting with proper shades according to weather conditions. Thirdly, public shows their concern regarding security which was 46 percent, as there isn't any proper security on Sea view.

The interviews conducted with three set of peoples; users, shop vendors, and professionals. The users and shop vendors concerned with cleanliness, physical quality, poor maintenance but most of both concerns with safety. Such as visitation time for user's are from morning to evening but none of them spent time an hour or two during the whole day in open space and no visitation occurs after 8 p.m. because of lightning issues (fig, 4.21).

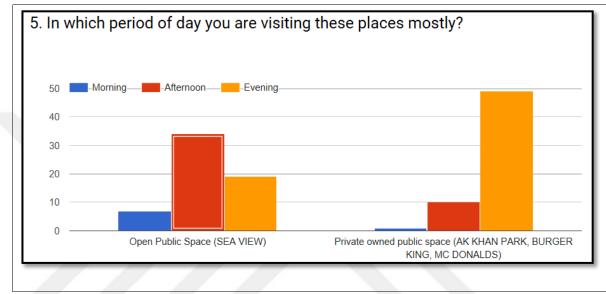


Figure 4.21: User's visitation timings

As there is no lightning in open space at all, so it all went dark and unsafe to stay. Whereas shop vendors concern with the same issue and no proper facilitation space for them to promote their business and they have to give bribe to police on daily basis to occupy a space for themselves to sell their stuff. Although an interview conducted with Ar. Arif Hassan, a well-known architect of Karachi he pointed out about that management and ownership issues with regards to open spaces in Karachi. As there is no institution that controls to maintain the quality of these spaces, therefore it is hard to control and check the quality of these spaces, as well as several parts of public spaces, are handling to private entities to get economic benefits from.

Source: Researcher

5. CONCLUSION AND DISCUSSION

We are living in a world surrounded by buildings, heavy traffics, rush hour and daily stressful works. For these reasons, we need some time for ourselves to spend time with family, friends or individual to hang out and enjoy to break through from our daily stressful urban lives. Therefore, every city has spaces whether small or big, open or closed, public or privately owned spaces where all of the individuals get together and spend quality leisure time.

In our case which is Karachi, a metropolitan city having a population of 20 million is always subjected to several issues such as; Neo-liberalization and developments for the reason to create quality urban areas and to form Karachi, an up-rising city of Pakistan due to its economic revenue generation for Pakistan. These neo-liberal policies were entitled to private entities and comes up with the cost of privatization and land reclamation which break through the sense of attachments for urban inhabitants with the sea. Several areas along the coastline of Karachi were subjected to privatization and many villages were gentrified in the name of developments which triggers following issues in the form of discrimination, segregation of land appointed for public use, social and cultural rituals disconnection for urban inhabitants.

Karachi is among the very first city that gives a better opportunity for jobs and shelter, refugees from the neighboring countries resided there to obtain jobs opportunities. Due to the large population, densification and being an ally for the NATO forces in the war against religious extremists that were fighting in Afghanistan and Karachi is the only sea route for their supply.

Karachi started to get targeted by the extremist's groups from outside and inside the country. The rate of terrorism and crime rose up, the public started to spend more of their leisure time within over managed and controlled private open spaces. As a result of which this research is conducted to find out the impact and differences of these aspects on public open spaces (publicly and private owned) in Karachi, to make comparative analysis between both of open spaces to find out quality indicators of these open spaces regarding user's perception, concerns and attitudes with respect to public open spaces and make a precautions for open spaces in Karachi.

In order to find the quality and maintenance precautions of open spaces in Karachi, an approach in this research that is conducted composed of following characteristics of public open spaces such as; accessibility, comfort, socialization, and activity. The reason for choosing these characteristics are due to all of the attributes of public spaces are interrelated to each other and is common among most of the researches done such as placemaking Chicago, quality indicators of public spaces in terms of user's perception by Elif Karacor and other.

The several factors that influences are accessibility, activity, comfortability and socialization that cause their quality of publicly owned open space. These characteristics are directly related to the quality of space such as mentioned by Gehl's regarding the role of activities in public spaces, if the quality of the space would be better it will be a better platform to perform activities. Whereas comfort related to physical elements, cleanliness, and security measurements, if there isn't any cleanliness and as by looking into situations of Karachi so unavailability of safety assurance could cause a fear of visiting this space. On another hand, controlled and over managed space would be preferred instead of it. The results that derived from research shows us that in public open space: accessibility is comparatively high from privately owned open space. Whereas, other three quality indicators of public open space (comfortability, socialization, activities) are lower as compare to privately owned open space. Furthermore, our findings demonstrated that ownership of spaces plays a significant role in perceiving the quality of spaces. On other hand management and control is highly connected to the quality of space. As these factors of ownership and control were also mentioned by Car et al (Carr et al. 1992: 50) Madnipour who suggested that prison and management should be under public control. Altman also suggested about occupancy and control of public space by it its users (Altman 1986: 151). Control as a dimension of public space by Mark Francis also supported this approach of ownership and control of public space from his research.

A good quality open space is directly associated with improvement in well-being, user satisfaction, quality of life, and it contributes to social inclusion. Therefore, there is a need to revive the current on-going trend of controlling and planning of public spaces from the responsible institutions. Our research shows that ownership and management play a vital role to perceive and maintain the quality of public space along with quality perception factors such as; access, comfort, socialization, and activity.

Our research supports the similar approach and agreed to have the importance of **ownership** and **control** to increase or maintain the quality of public open spaces. Along with these factors, the role of institutes in this regards is also important to take control and manage the space for the public. Because there was concern's by expertise such as Arif Hassan, by taking his interview he mentioned that there isn't any institution that does management and planning of land use distribution. Allowing public entities to private are common practice going on here, so the involvement of the public sector is highly important to maintain and upgrade the quality of open public spaces in Karachi.

REFERENCES

Books

- Al Sayyad, N., & Massoumi, M. (2011). The fundamentalist city?: Religiosity and the remaking Of urban space. Oxon: Routledge.
- Altman, I. 1975, *The Environment & Social Behavior: Privacy, Personal Space, Territory, Crowding*, Brooks/Cole Pub. Co, Monterey, Calif.
- Altman, I. 1986, Culture & Environment, Cambridge University Press, Cambridge.
- Brown, L.A., Gillepsie, S.D., Grove, D.C., Manzanilla, L., McAnany, P.A., Plunket, P.,

Sheets, P., Simmons, S.E., Smith, M.E., Spence, M.W. and Uruñuela, G.,

2002. Domestic ritual in ancient Mesoamerica.

Carmona, M., De Magalhaes, C., & Hammond, L. (2008). Public Space: The Management Dimension. New York: Routledge Press. Carr, F. S., Rivline, M. & Stone, L., 1992. Public Space. New York: University Press. Crouch, D., Naylor, S., Ryan, J. and Cook, I., 2016. *Cultural turns/geographical turns:*

perspectives on cultural geography. Routledge.

Dovey, K. & Fitzgerald, J. 2000, 'Space of 'becoming'', in *Metropolis 2000 – Which Perspectives? Cities, Social Life and Sustainable Development (IAPS 16 Conference Proceedings)*, eds. G. Moser, E. Pol, Y. Bernard, M. Bonnes, J. Corraliza & M.
V.Giuliani, Paris.

Dovey, K. & Fitzgerald, J. 2000, 'Space of 'becoming", in *Metropolis 2000 - Which Perspectives? Cities, Social Life and Sustainable Development (IAPS 16 Conference Proceedings)*, eds. G. Moser, E. Pol, Y. Bernard, M. Bonnes, J. Corraliza & M. V.
Giuliani, Paris.

- Easton, G. R. 1988, 'Economics of Waterfront Development in Smaller Communities', in R.
 Goodwin, (ed.) Waterfront Revitalization for Smaller Communities, University of
 Washington, Seattle, pp. 21-8.
- Faruqui, M., (1995). Contextualizing Karachi's violence. Comparative studies of South Asia, Africa, and the Middle East. Duke University Press.
- Gehl, J. (2011). Life between Buildings: Using Public Space. Washington DC: Island Press.
- Holland, C., Clark, A., Katz, J., & Peace, S. (2007). Social Interactions in Urban Public Places. Bristol: The Policy Press.

Jacobs, J. (1961). The Death and Life of Great American Cities . London: Vintage Books.

- MP, E & U., 1990. Karachi coastal recreation development plan Karachi: Karachi Press.
- Kostof, S. 1992, The City Assembled: The Elements of Urban Form Through History,

Thames & Hudson Ltd., London.

- Loukaitou-Sideris, A., & Banerjee, T. (1998). Urban Design Downtown: Poetics and Politics of Form. California: University of California Press.
- Madanipour, A. 2003, *Public & Private Spaces of the City*, First edn, Routledge, New York.

Malone, P., 2013. City, capital and water. Routledge.

- Ozer, O. & Kubat, A. S., 2007. WALKING INITIATIVES: a quantitative movement analysis. Istanbul, s.n. Project For Public Spaces, 2000. How To Turn a Place Around: A Handbook for Creating Successful Public Spaces. New York: Project for Public Spaces.
- Porteous, J. D. 1977, *Environment & Behavior: Planning & Everyday Urban Life*, Addison Wesley Publishing Company, Reading.

Project For Public Spaces, 2000. How To Turn a Place Around: A Handbook for Creating Successful Public Spaces. New York: Project for Public Spaces.

Schumpeter, J. A. 1975, 'Capitalism, Socialism and Democracy', Harper, New York.

Torre, L. A. 1989, *Waterfront Development*, Van Nostrand Reinhold, New York.

Periodicals

- Aspinall, P., Mavros, P., Coyne, R. & Roe, J., 2013. The urban brain: analysing outdoor physical Activity with mobile EEG. British Journal of Sports Medicine, pp. Doi: 10.1136/bjsports-2012-091877.
- Beck, H., 2009. Linking the quality of public spaces to quality of life. Journal of Place Management and Development, 2(3), pp.240-248.
- CABE, 2005. Decent parks? Decent behavior? The link between the quality of parks and user Behavior, London: Commission for Architecture and the Built Environment.
- Carmona, M. (2010). Contemporary Public Space, Part Two: Classification. Journal of Urban Design, 15, 157-173.
- Carr, F. S., Rivline, M. & Stone, L., 1992. Public Space. New York: University Press.
- Catharine, W. T., 2011. Linking landscape and health: The recurring theme. Landscape and Urban Planning, 99(3/4), p. 187–195.
- Cattell, V., Dines, N., Gesler, W., & Curtis, S. (2008). Mingling, Observing, and Lingering: Everyday Public Spaces and Their Implications for Well-Being and Social Relations. Health & Place, 14, 544-561.
- Chotani, H.A., Razzak, J.A., & Luby, S.P. (2002). Patterns of violence in Karachi, Pakistan. Injury prevention, 8, 57-59.
- Davis, D., Urban Resilience Report. (2011). USAID.

- Efroymson, D., Thanha, T. T. K., & Ha, P. T. (2009). Public Spaces: How They Humanize Cities. Dhaka: Health Bridge-WBB Trust.
- Fagence, M. 1995, 'City Waterfront Redevelopment for Leisure, Recreation, & Tourism: Some Common Themes', in S. J. Craig-Smith & M. Fagence, (eds.), *Recreation & Tourism as a Catalyst for Urban Redevelopment*, Praeger Publishers, Westport, pp. 135-56.
- Fagence, M., 1995. City waterfront redevelopment for leisure, recreation, and tourism:
 some common themes. *Recreation and Tourism as a Catalyst for Urban Waterfront Redevelopment, Praeger, Wesport Connecticut, pp.135-156.*

Francis, M., 2003. Urban open space: designing for user needs. London: Island Press.

- Gayer, L., (Jan 2007). Guns, slums, and "yellow devils": A genealogy of urban conflicts in Karachi, Pakistan. Modern Asian studies, 41(3), 515-544.
- Gazdar, H., & Mallah, B.H., (Nov 2013). Informality and political violence in Karachi urban Studies, 50(15), 3099-3115.
- Gehl, J., 2007. Public spaces for a changing public life. In: Open Space People Space. Oxon: Taylor and Francis.
- Goheen, P.G., 1994. Negotiating access to public space in mid-nineteenth century Toronto. *Journal of Historical Geography*, 20(4), pp.430-449.
- Graham, S., & Aurigi, A. (1997). Virtual Cities, Social Polarization, and the Crisis in Urban Public Space. The Journal of Urban Technology, 4, 19-52.
- Hartig, T., 2007. Three steps to Understanding restorative environments as health resources. In: Open Space people Space. Oxon: Taylor and Francis.
- Hassan, A., 2012. Karachi: The land issue, Karachi: NED Karachi.
- Hillier, B., 1985. The nature of the artificial: The contingent and the necessary in spatial form in Architecture. Geoforum, 16(2), pp. 163-178.
- Hillier, B., 1996. Space is the machine: A configuration theory of architecture. Cambridge:Cambridge University Press.

http://www.placemakingchicago.com/about/qualities.asp

Jones, A. 1998, 'Issues in Waterfront Regeneration: More Sobering Thoughts, A UK Perspective', *Planning Practice & Research*, vol. 13, no. 4, pp. 433-442.

- Karachi: A volatile metropolis. (2010). BBC News Urdu. Retrieved From http://www.bbc.com/news/world-south-asia-11342588>.
- Koohsari, M. J., Karakiewicz, J. A. & Kaczynski, A. T., 2013. Public open space and walking.
- Lloyd, K., & Auld, C. (2003). Leisure, Public Space and Quality of Life in the Urban Environment. Urban Policy and Research, 21, 339-356.
- Lotfi, S., & Koohsari, M. J. (2009a). Measuring Objective Accessibility to Neighborhood Facilities in the City (A Case Study: Zone 6 in Tehran, Iran). Cities, 26, 133-140.
- Lotfi, S., & Koohsari, M. J. (2009b). Analyzing Accessibility Dimension of Urban Quality of Life: Where Urban Designers Face Duality between Subjective and Objective Reading Of Place. Social Indicators Research, 94, 417-435.

Lynch, K. 1960, The Image of the City, Technology Press, Cambridge, Mass.

- Lynch, K., 1960. The Image of The City. Cambridge, Massachusetts: MIT Press.
- Malone, P. 1996, 'City, Capital, and Water: Introduction', in P. Malone, (ed.) *City, capital, and water*, Routledge, New York, pp. 1-14.
- Mitchell, D. (1995). The End of Public Space? People's Park, Definitions of the Public, and Democracy. Annals of the Association of American Geographers, 85, 108-133.
- Montgomery, J. (1998). Making a City: Urbanity, Vitality and Urban Design. Journal of Urban Design, 3, 93-116.
- Nasution, A.D. and Zahrah, W., 2014. Community perception on public open space and quality of life in Medan, Indonesia. *Procedia-Social and Behavioral Sciences*, *153*, pp.585-594.
- Németh, J., & Schmidt, S. (2011). The Privatization of Public Space: Modeling and Measuring Publicness. Environment and Planning B: Planning and Design, 38, 5-23.
- Pinder, D. & Witherick, M. 1993, 'Port Industrialization, Urbanization & Wetland Loss', in M. Williams, (ed.) *Wetland: A Threatened Landscape*, Blackwell Publishers, Oxford, pp. 234-66.

Placemaking Chicago (2016). Comfort of Public Spaces .

PPS (2016). Project for Public Spaces . http://www.pps.org/

- Shaw, B. 2001, 'History at the Water's Edge', in R. Marshall, (ed.) *Waterfronts in Postindustrial Cities*, Spon Press, London, pp. 160-172.
- Stathopoulos, T., Wu, H., & Zacharias, J. (2004). Outdoor Human Comfort in an Urban Climate. Building and Environment, 39, 297-305.
- The "slum wars" in Medellin, Colombia (1970s 2013). Informal Settlements Research, MIT. Retrieved from http://informalsettlements.blogspot.com/
- The role of proximity, perceptual qualities of the surrounding built environment, and Street configuration. Environment and Behavior, 45(6), pp. 706-736.
- Tunbridge, J. 2002, 'Large Heritage Waterfront on Small Tourist Islands: The Case of the Royal Naval Dockyard, Bermuda', *International Journal of Heritage Studies*, vol. 8, no. 1, pp. 41-51.
- Uysal, M., M. Joseph Sirgy. *Identity*, 44(2), pp.124-138.
- Williams, K., & Green, S. (2001). Literature Review of Public Space and Local Environments For the Cross Cutting Review Final Report . Oxford: Oxford Brookes University, Department for Transport, Local Government and the Regions Research Analysis and Evaluation Division.
- Wood, D. F. 1965, 'Renewing Urban Waterfronts', *Land Economics*, vol. 41, no. 2, pp. 141-9.
- Yang, W., & Kang, J. (2005). Acoustic Comfort Evaluation in Urban Open Public Spaces. Applied Acoustics, 66, 211-229.



APPENDICES



Evaluating the Quality Of Open Spaces : Karachi Sea View and AK KHAN PARK, MC DONALD'S, BURGER KING at Clifton,Karachi

We need space to breathe, socialize, to have a space for relaxation from our daily stressful workload by living in this urban concrete jungle. Public space is a space, that can be accessible without any limitation, ethnic or income discrimination, place to relax, socialize and helps for the growth of community formation. These spaces can be parks, cafes, bazzar, retails etc. These spaces are vanishing due to development occurring for economical benefits and the right from the public to have a healthy living environment is distorting. Here in this survey, we are evaluating the quality of Open Public Space (SEA VIEW) and Private owned Open Space (AK KHAN PARK, BURGER KING, MC DONALD'S) which lies next to each other at Clifton ,Karachi. Your Opinion in this regards counts for the improvements of open spaces in Karachi for Urban Inhabitants. In order to do that we need to compare them.

* Required

Time limit for participation is till ; 2-5-18

1. 1. Gender Mark only one oval.			
Female			
Male			
2. 2. Age Group			
Mark only one oval.			
18-25			
25-40			
40-Above			
 3. How you are going to both place Mark only one oval per row. 		ar Motor	cycle Put
Open Public Space (Sea View)	\bigcirc		\supset
Private owned public space (AK Khan Park, Burger King, MC Donald's)	\bigcirc		\supset
 4. With Whom you are going for you Mark only one oval per row. 	Family	o these p	
		-	
Open Public Space (SEA VIEW)	\bigcirc	\bigcirc	\bigcirc
Private owned public space (AK KHAN PARK,BURGER KING, MC DONALDS)	\bigcirc	\bigcirc	\bigcirc

Public transport

5. 5. In which period of day you are visiting these places mostly? *

Mark only one oval per row.

		Mornin	ng	Afternoo	m	Evening
Open Pu	ublic Space (SEA VIEW)	C)	0		0
	owned public space (AK ARK, BURGER KING, MC DS)	0)	0		\bigcirc

6. 6. Purpose for your visit? *

Mark only one oval per row.

	Dining	Sports	Refreshment	Social interaction with friends/family
Open Public Space (SEA VIEW)	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Private owned public space (AK KHAN PARK)	\bigcirc	\bigcirc	\bigcirc	\bigcirc

7. 7. Do you have to pay while entering in any of open spaces; *

Mark only one oval per row.

Yes	No	Maybe
		100 Total 1-

Se	a View	Kara	chi	C)(C)
AK	Khan	Park,	MC,	BK	00).()

Evaluation of both spaces

Score between 1-10 according to your experiences with these spaces

8. 8. SEA VIEW, Karachi is easily Accessible; *

1	2	3								
	:0	3	4	5	6	7	8	9	10	
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Strongly Agree
	ccessib	ile *								
1	2	3	4	5	6	7	8	9	10	
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Strongly Agree
	lurger K	Cing, MC	C Donal	ds is ea	sily acc	:essible	ç.•			
1	2	3	4	5	6	7	8	9	10	
\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	Strongly Agree
	Park, B	ne oval. 1 2 Park, Burger M ne oval.	1 2 3	ne oval. 1 2 3 4 O O O O Park, Burger King, MC Donal ne oval.	ne oval. 1 2 3 4 5 O O O O Park, Burger King, MC Donalds is ea ne oval.	1 2 3 4 5 6	1 2 3 4 5 6 7	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9 10 Image: Comparison of the system o

11. 9.1. It is Visually Accessible; *

Mark only one oval.

	1	2	3	4		6	7		9	10	
Strongly Dissagree	0	0	0	\bigcirc	0	0	\bigcirc	\bigcirc	0	\bigcirc	Strongl Agree
2. 10. SEA VIE Mark only o	100	achi is c	comfort	able; *							
	1	2	3	4	5	6	7	8	9	10	
Strongly Dissagree	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Strongl Agree
Contraction of the second											
None (None (Other:	trian orie of them n Park,I			i is com	ifortable	8; *					
Pedes None Other:	trian orie of them n Park,I						7	8	9	10	
Pedes None Other:	n Park,I	BK,MC,	Karachi				7	8	9	10	Strong

16.	12. SEA	VIEW.	Karachi is o	bood enough	for	socialization *

Mark only one oval.

				1000							
Strongly Dissagree	\bigcirc	0	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	0	0	Strongi Agree
Becuase of;											
Check all that			1929-11-185	10.00							
Accurac	1000			ds							
Eligibility	12808		107.00								
Mixture		and eth	nnic grou	up							
None of	them										
Other:											
Mark only one	e oval. 1	2	3	4	5	6	7	8	9	10	
	<u>.</u>	10	័	523	<u></u>		62	°.	<u>്</u>	10	
Strongly Dissagree	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Strong Agree
Check all that	y for m	100		ds,							
Accurac Eligibility Mixture None of	y for m y of peo of ages	ople in g	roups								
Accurac Eligibility Mixture None of Other:	y for m y of peo of ages them A VIEW	ople in g	roups mic gro	up	space	for perf	ormano	e of act	tivities	· ·	
Accurac Eligibility Mixture None of Other:	y for m y of peo of ages them A VIEW	ople in g	roups mic gro	up	r space 1	for perf	ormanc 7	e of act	tivities 9	2 * 10	
Accurac Eligibility Mixture None of Other:	y for m y of peo of ages them A VIEW e oval.	pple in g and eth Karac	roups mic grow	up s better		2224					
Accurac Eligibility Mixture None of Other: 14. Does SE/ Mark only one	y for m y of peo of ages them A VIEW e oval. 1 0 es with ding et	Karac 2 regard	noups nnic grou hi offen 3	up s better 4	5	6	7	8	9	10	Satis
Accurac Eligibility Mixture None of Other: 14. Does SE/ Mark only one Strongly Dissatisfied	y for m y of peo of ages them A VIEW e oval. 1 0 es with ding et	2 cregard cc),*	noups nnic grou hi offen 3	up s better 4	5	6	7	8	9	10	Stron Satisf

-- ---

	Mark only on	e oral.										
		1	2	3	4	5	6	7	8	9	10	
	Strongly Dissatisfied	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Strong
	14.3. Spaces Mark only on		kdren's,	Spaces	s by Ge	nder *						
		1	2	3	4	5	6	7	8	9	10	
	Strongly Dissatisfied	\bigcirc	\bigcirc	0	\bigcirc	0	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	Strong Satisf
	15. Does (AP activities? * Mark only on		Park, Bu	urger Ki	ing, MC	Donald	rs) offe	rs bette	r space	for per	forman	ce of
2.5		1	2	3	4	5	6	7	8	9	10	
	Strongly Dissatisfied	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	Stron Satisf
	15.1. Activiti			to; Ac	tive Rec	reation	such a	is: (cycl	ing, car	mping, I	fishing,	hiking,
	15.1. Activiti horseback ri Mark only on	iding etc		to; Ac	tive Red	reation	such a	is: (cycl	ing, car	mping, 1	fishing,	hiking,
	horseback ri	iding etc		3 to; Ac	4	5	6	rs: (cycl	8	9	fishing, 10	hiking,
	horseback ri	iding etc e oval.	c) *									Stron
26.	horseback ri Mark only on Strongly	e Recreating, bird	2	3	4	5	6	7	8	9	10	Strong Satisf
26.	horseback ri Mark only on Strongly Dissatisfied 15.2. Passiw wildlife view	e Recreating, bird	2 ation (h	3	4	5	6	7	8	9	10	Stron Satisf
26.	horseback ri Mark only on Strongly Dissatisfied 15.2. Passiw wildlife view	e oval. 1 e Recreating, bird e oval.	2 ation (h	3 iking, r ing)*	4	5	6 O	7	8 Onting, t	9 Dackpac	10	Stron Satisf
26.	horseback ri Mark only on Strongly Dissatisfied 15.2. Passiw wildlife view Mark only on Strongly	e oval. e oval. 1 e Recreating, bird e oval. 1 1 s for chil	2 ation (h i watch) 2 0	3 iking, r ing)	4 0 unning 4	5 bicycli 5	6 O	7	8 Onting, t	9 Dackpac	10	Strong Satisf
26.	horseback ri Mark only on Strongly Dissatisfied 15.2. Passiw wildlife view Mark only on Strongly Dissatisfied 15.3. Spaces	e oval. e oval. 1 e Recreating, bird e oval. 1 1 s for chil	2 ation (h i watch) 2 0	3 iking, r ing)	4 unning 4	5 bicycli 5	6 O	7	8 Onting, t	9 Dackpac	10	Strong Satisf