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Re-Visioning Places of Public Gathering in the Contemporary Arab Urbanism

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Cover image: Public space in Dubai. Picture by Mona Helmy.

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EDITORIAL

Re-visioning Places of Public Gathering in the Contemporary Arab Urbanism

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Over the past decades, contemporary urbanism in Arab cities has undergone a radical transformation under the influence of a variety of forces, such as globalization, with the influx of money, ideas, people, and development models. Consequently, development visions of cities in the Arab world have shifted from local to imported international models, generating new paradigms of Arab contemporary urbanism, which are strongly impacting on public places in particular. Imported international models in Arab Cities have varied between establishing new urban typologies resembling Western urban imagery and icons, gated communities, themed cities, gigantic commercial centres and shopping malls, among other models.

Places of public gathering in Arab cities are conceived as catalysts for change and as opportunities for domesticating and appropriating imported Western urban models. The multiplicity of opportunities for shaping, upgrading and rebuilding places of public gathering, from global paradigms to local realities, have stimulated many urban ambivalences and complexities, in which reconsidering places for public gathering nowadays implies a transdisciplinary understanding and a multifaceted perspective. The superimposing of changing concepts has critically transformed settings, structure, and functions of places for public gathering, while establishing the Arab urbanism as a brand new competitive urban system.

This themed issue of The Journal of Public Space brings together a variety of perspectives, approaches, reflections and ideas to provide a critical overview of contemporary places of public gathering in the Arab cities. Fourteen manuscripts, between papers and viewpoints were highly selected to cover a variety of sub-themes of places of public gathering in the Arab world, aiming at:

• Exploring new urban typologies of places of public gathering;
• Conceptualizing places of public gathering in various Arab cities under the forces of globalization trends;
• Examining the notion of the privatization of public places in Arab cities and its impact on people’s social life;
• Exploring the impact of physical distancing and the relevant reclaiming of public places;
• Designing places to support social interaction and to generate social life;
Transforming shopping centres and malls into mixed-use community centres;
Analysing how Eventifying places of public gathering in Arab cities is changing their setting, structure and function;
Investigating various trends of Creative places of public gathering in Arab cities.

This themed edition commences with a critical editorial article by Prof. Nezar AlSayyad that debates the meanings and uses of urban space in the Arab City from a historical placemaking perspective in Arab Cities, in terms of realities, challenges, and prospects. In his article, AlSayyad claims that “there has never been a prototypical city in the Arab world, which is not considered a homogenous urban realm; including its different peoples, nations and political regimes have produced cities of different sizes, different densities, different sub-cultures and different levels of wealth”. He argues that “people’s interaction in space and the language of the street may provide more commonalities than differences” in the public gathering in the Arab context.

This themed issue is divided into four main sections. Three sections are classified as per the content of their included papers under three main categorizes that use Space, Society, and System as their dominant foundational and contextual domains. It also includes a Viewpoints section that showcases real practices in different contexts. Section one “Space” includes seven papers. It starts with a paper titled as “Urban Elements in the Saudi Arabian Najd Region and their Influence on Creating Threshold Spaces” by Mohammed Mashary Alnaim. The paper investigates how urban elements generate gathering spaces, and how these generated spaces are being transformed into threshold spaces within the built form. This done through a Space Syntax analysis technique, which examines a number of factors related to space, territory, society, culture, and environment.

Aseel Naamani, and Ruth Simpson are questioning if public spaces are venues for peacebuilding in Lebanon. In their paper with the same title, they investigate the role of civic movements in reclaiming public spaces in Beirut and Tripoli. They argued that “Urban spaces, including the country’s two biggest cities – Beirut and Tripoli – have been largely privatized and have become the preserve of an elite few, and post-war development has been dogged by criticism of corruption and exclusivity”. The paper states that reclaiming public spaces is central to reform and rebuilding relationships across divides after years of conflict as a cornerstone of peacebuilding efforts.

In their paper “Investigating Users Changing Needs in Relation to non-designed/Unplanned Public Spaces in Cairo” Joseph M. Namar, Mohamed A. Salheen, and Ayat Ismail critically review and find out theories and practices that provide solutions for dealing with non-designed open spaces development in terms of users changing needs and contributions. The paper studies the unplanned public spaces in Cairo in relation to the needs of the Cairines. The results of the paper include development considerations that need to be respected in Cairo public spaces with more concern for people’s usage and interaction with the space.

The paper “The Redemptive Potential of the Street: A Multi-angular Analysis of Dubai’s Pedestrian Infrastructure” by Lamia Abdelfattah, Filippo Bazzoni and Rawad Choubassi, offers several potentials for adapting Dubai’s streetscape to make it more walkable year-round.
It provides some key strategies to adaptively retrofit Dubai's streets in order to combat the current pandemic situation without risking the loss of active modes of travel, and to enhance walkability of the city on the long run.

In his paper “New Typologies of Contemporary Shopping Malls in Egypt”, Karim Youssef traces new typologies in the design of mega shopping malls in Cairo as they integrate new public gathering spaces for leisure, recreation, and entertainment.

Section one ends with a paper by Hellen Aziz, Salma Ellakany that discusses “The segregation in access to spaces for urban activities during COVID-19 pandemic in relation to gated communities. Residential and beachfront gated communities in Egypt”. The paper argues that the segregation in the rights of use of open urban spaces inside and outside gated communities, during the pandemic caused an increase of social interaction inside their boarders.

The second section of this themed issue focuses on “Society” as a base for creating new patterns of public gathering places in the Arab world. It begins with an interesting group research paper with the title of “COVID-19 Pandemic: between Public Space and Users’ behaviours: Case studies from Egypt, Jordan, and Germany”. The paper is a joined effort of several researches, living in different cities/countries; to investigate and compare the relation between the governments’ regulations regarding public space and citizens’ behaviour in light of the COVID-19 pandemic in their counties. Authors Hassan Elmouelhi, Sara Nowar, Hellen Aziz, Nada Abdrabou, Ahmed Gaballah, and Tayseer Khairy, have recommended a collaborative framework in designing public spaces, that includes the local community in cooperation with urban planners and governments.

The second viewpoint with the title “Post-development practices of public space: between cohabitation and "domination" of new atmospheres” Abdellah Moussalih uses the case of Rabat dock, Rabat-Morocco. The paper investigates the social uses and practices of citizens to identify the evolution of the relationship between the transformation of spatial structures and the production of landscapes representative of the image of the urban area.

The third section of this themed issue includes a paper that focuses on the “Systems”, which guides its research problem. In this section, Tarek Fouani questioned “What Happened to the Public Spaces of the Arab World? From Colonization to Revolution: The Case of Lebanon”. The paper critically assesses the circumstances under which the European idea of public spaces was imported and implemented in the Arab context, in which spaces of public gathering in the Arab world lacked their essence.

The last section of this issue includes two viewpoints that showcase of real practices to enrich the theme of this issue on re-visioning places of public gathering in the contemporary Arab urbanism. The first viewpoint with the title “Public Spaces in the Arab Region” by Elaf Raslan and Lubna Shaheen from UN-Habitat, Regional office for Arab States, is stating that the Arab Region has been facing various challenges. While some countries are facing socio-economic issues, others have been civil strife and conflict. In both cases, public spaces play an important role in tackling these issues. The
viewpoint discusses the term “private public spaces” as a notion that denies the right of citizens to use public spaces. Several case studies in the Arab world are presented to guide the needs for special programs to develop child friendly and women friendly public spaces. The viewpoint calls for a governance structures can still be further adopted to include stronger representation from the civil community and stronger ownership from the community.

Another viewpoint is contributed by May al-Ibrashy. It represents part of the initiatives done by Megawra Built Environment Collective. In her viewpoint titled as “Heritage in the street: Megawra | BEC’s Athar Lina Initiative in Historic Cairo” May al-Ibrashy narrates how urban issues in al-khalifa was tackled. Using a comprehensive participatory approach on all levels, a series of participatory research and design meetings to study the relationship between the heritage of the street and the community. This was done through not only physical interventions in public spaces, but also through people’s activities that celebrate al-Khalifa area.

In conclusion, this themed issue did not intend to give ready recipes to create or to revisioning places of public gathering in the contemporary Arab urbanism, rather it attempts to drop stones into still water; to create waves of ideas, initiatives, and actions. Through a journey of very rich and diverse problems, analysis, discussions and recommendations presented in the peer-reviewed articles, this issue sheds light on the importance of contemporizing our conventional ways of gathering in public places. It proofs that there is a need for fresh innovative perspectives of planning and designing public places for social gathering in the Arab world, not only to solve the possible emerged malfunction of some social gathering places, but to re-vision them as a whole experience, where socio-cultural aspects are celebrated.

And finally, I have the honour as the main editor to present this special issue as a humble contribution to such hopeful re-visioning.

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EDITORIAL

On the Meanings and Uses of Urban Space in the Arab City. An Historical Perspective

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This special issue of The Journal of Public Space deals with the idea of re-visioning places of public gathering in the Contemporary Arab City. The three keywords or concept in this formulation are the “Arab city”, and “Public gathering” and “urban place or space”. It is worthwhile to spend some time interrogating each of these concepts by themselves and in a relationship to each other. We may first ask what is the Arab city? Is it a city that is truly different from its counterparts in much of the global south? It is different from the non-Arab Middle East, or for that matter other cities in the developed world that underwent substantial changes over during the last few decades. Equally important is to posit the question regarding the types of public gatherings that occur in the Arab city today which require a specific spatial accommodation. And finally, it is essential to inquire about the nature of urban space in the so-called Arab city and to interrogate how this space is used to accommodate, contain and sometimes even to restrict different forms of public activities.

As an urban historian who has spent much of the last three decades studying Arab urbanism, I believe history sometimes offers a perspective or a method to address some of these questions although it may not offer us real answers. On the issue of the Arab city, it is important to recognize that there has never been a prototypical city in the Arab world. The Arab world was not and still is not a homogenous urban realm and its different peoples, nations and political regimes have produced cities of different sizes, different densities, different sub-cultures and different levels of wealth. In fact, it is common today to find certain cities in Arab-speaking North Africa that have a lot more in common with cities elsewhere in the Global South in terms of culture and social life than other Arab cities. Similarly, some cities of the Arabian-Persian Gulf that have more in common with cities Global North in terms of infrastructure and economy. Historically this may not have always been the case. Decades ago, the late scholar Janet Abu-Lughod brilliantly argued that one always knows when one is in the presence of a Muslim culture. The images, the sounds, the smells, and the social interaction between people in public are what makes the Muslim City, she suggested. A similar argument may be made today about Arab cities being unified under one category in which people’s interaction in space and the language of the street may provide more
commonalities than differences. Hence, it becomes legitimate to speak of intersections of spaces and activities in the Arab city as long as one is willing to account for the great diversity that may exist between them.

If we turn to the second question which deals with the nature of public gatherings in the contemporary Arab city, we encounter a similar dilemma. It is part of human nature for people to want to get together in public and in large numbers to celebrate certain national and religious occasions, cultural festivals, and sometimes to engage in political protest. The initial success of the Arab spring was touted by many as a reminder of the importance of urban open space for public gatherings. Subsequently, the Arab Spring failed to bring about any significant political or structural changes to the countries of the Arab world that experienced it. However, this failure shouldn’t be viewed as a failure of the mechanisms of political mobilization or of the qualities of open space. Instead, some have attributed this outcome to the failed methods and practices of public gatherings under political regimes that are fundamentally intolerant of the notion of publicness altogether and particularly of public political dissent.

We now come to our final question regarding the nature of urban open space in the Arab city and its relationship to urban activities. Here history offers us an interesting perspective. We know that there is a strong relationship between the socio-political structure of a society and the type of urbanism it creates. Societies that have very clear distinctions between their political, commercial and religious institutions as represented by specific buildings like in the Medieval European city have created open spaces that parallels this institutional structure. On the other hand, societies that had a more subtle connection and intertwined relationships between its different institutional bodies, like the Arab city, have created incongruent urban spaces that do not clearly represent the power structure of these societies. This may make it more difficult to link the urban open spaces of the Arab city to specific symbolic representations of power.

There are a few well established mechanisms to map and analyse open space in the city. Architects and urban designers have usually favoured the use of the figure-ground approach because in quantified the relationship between the built masses and the voids between them revealing significant formal qualities. Based on this approach, one may identify four types of open spaces in the traditional Arab city. First, there are the Maidans, sometime also referred to as Sahas. These were open spaces that existed outside of the city gates and in few cases inside the city, fronting a major function like a palace or a Friday Mosque. They often accommodated Friday and Eid prayers, and later on the day would serve as weekend or seasonal markets. A second type, sometimes called Rahbas or ‘Atfas, are smaller irregular spaces that occurred in front of Mosque, Madrasas and other religious structures inside the city and were surrounded by small shops and informal vending activities in different times of the day. The third type are small courtyard-like spaces sometimes called a hoshs located in the alleyways of the traditional residential quarters or Haras, and used mainly for neighbourhood purposes.

And finally, there is the Qasbah, the linear pathway or thoroughfare that often extends from one gate to another and contains the main bazaar. It was the most important circulation space in the city who width varied based on the functions it served making it wide in certain places and very narrow in others.

A different way of looking at public gatherings in the traditional Arab city is not to start with the standard typology of open spaces discussed above but instead to focus on the nature of urban activity that required public gatherings and identify the open spaces that
accommodated them. In this regard, we may observe that unlike traditional Greek or Roman towns, large open space seldom existed in the traditional Arab city. The Maidan was not equivalent to the Greek Agora or the Roman forum and it did not perform the same function of providing an arena for public gatherings. The Friday Mosque provided that place where the community could possibly meet to discuss matters of life, state and religion. Except for festivals celebrating victories and preparations for wars, political activity in the traditional Arab city did not require public gatherings. It usually involved only smaller groups of elite individuals and occurred inside buildings. Commercial activity on the other hand took place everywhere in the Arab city but specialized markets and commerce in valuable goods was mainly conducted in the bazaar, or the Qasbah. This was the main spine which still exists until today in the old quarters of many Arab cities and was the hub of socio-economic interaction. On it also lay the most important religious and administrative buildings as it was the social, religious and commercial spine of the city. This was the case for cities that were built by the Arabs like Basra and Kufa in Iraq or cities that were occupied by them during the Islamic conquest like Damascus or Aleppo. In the few cases, where the bazaar did not stretch on the main spine, it occupied an entire quarter that was specifically designated to accommodate its activities.

Islam was the predominant religion in most Arab cities and Muslim religious rituals did not require any particular urban space. Early mosques were simply open spaces not buildings that accommodated the congregation of believers. As the Muslim population of Arab cities grew, large spaces that were designated to accommodate overflow crowds for Friday and Eid prayers. In a few instances these spaces, which were often on the outskirts of the city and not in central sites, got formalized over time in these marginal locations. But space in the Arab city changed over time. Colonial presence, and foreign occupations changed the traditional Arab city as it introduced European style spaces like squares, piazzas and boulevard. The emergence of these spaces also facilitated the emergence of modern functions and new activities like clubs and malls, that were used by the rising elites and over time these new structures replaced the traditional coffee houses and the bazaars.

If we are to move forward and try to apply this historical perspective to understand contemporary Arab cities, two important attributes become very clear. First is the realization that the main public gatherings that are tolerated in the cities of the Arab world today by most regimes are those that mainly relate to social events and recreational activity. In fact, in recent years public gatherings for religious activity or for sports viewing were often monitored, limited or banned by governments out of concern and fear that they would delve into politics and create a protest against the political establishment. Second, it has also become clear that public gatherings for the purpose of exercising political protest or presenting popular demands can no longer be held in physical open space in most Arab cities under regimes that have mastered the control of public space. Indeed, today there are many laws on the books in many Arab countries today that simply prohibit any form of public gathering except those organized by the regime. Today, such public activities have moved to the virtual medium, a matter that allowed some observers to dub the takeover of public squares during the Arab spring as ‘Facebook’ revolutions. Indeed, this trend which may have started in the cities of the Arab World has now spread all over the world as social media has become the main platform not only for political dissent but also for social mobilization. This is the
reality of the world today, and such activities are likely to gain further strength in the aftermath of the COVID-19 crisis. 
It is my conviction that those of us interested in the study of public gatherings and open space in the Arab World have to turn our attention to the interwoven relationship between social media and social movements. One major lesson from the Arab Spring is that organizing public gatherings will require serious engagement with virtual social media. Indeed, the spatial and temporal aspects of the protests that brought about the Arab Spring suggest that the reciprocal interaction between social media, traditional media and urban space is going to be the wave of the future. This formulation does not simply reproduce relations between these actors, but it also transforms them over time and in the process, it may transform the forms and practices of Arab urbanism itself. Time will tell.

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Urban Elements in the Saudi Arabian Najd Region and their Influence on Creating Threshold Spaces

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Abstract
Gathering spaces are a significant component of any type of built form. Many factors influence their shape, size, and location and how they are integrated with their surroundings. This paper investigates how urban elements generate gathering spaces, and how these generated spaces transform into threshold spaces within the built form. The aim is to understand how the urban elements played a role in shaping the urban spatial order. The Space Syntax analysis technique is used to examine and understand a number of factors related to space, territory, society, culture, and environment. The paper’s objective is to discuss means of examining traditional architecture from the lens of cultural context. To reveal its concepts and embedded lessons developed by its society in the built heritage and use these key insights for problem-solving.

Keywords: urban culture, threshold, Najd, traditional architecture, space, socio-culture, elements, placemaking

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Introduction
The main core concepts in each of the traditional Arab settlements are the “public urban elements” which are represented in the centre of most settlements. The centre of an Arab settlement and its urban elements – typically composed of a masjid al-jumaa (mosque for Friday prayers), a souq (market), and a barahaa (public space) emerge and combine to support the spiritual, economic, and social life of the settlement (Hakim, 1986b; Abu-Ghazzeh, 1994). However, from an organizational point of view, the center is considered to be a place that distributes the daily movement within the settlement and connects its parts by one binding urban space (Akbar, 1984; Al-Hathloul, 1985). In this sense, the public space and its elements are perceived as an integral destination within the spatial order in the traditional Arab built environment (Alnaim, 2015).

Therefore, in our study we chose five settlements distributed across Najd, the central region of Saudi Arabia – old Riyadh, Alkhabra, Ad-Diriya, Ushaiqer, and Sudus – to examine the influence of urban elements on organizing the spatial order of the built environment.

Socio-cultural values, religious conventions, and daily life needs encouraged inhabitants to undertake the practice of their social lives in the public domain through the generation of gathering spaces (Jamalinezhada et al., 2012). One of these spaces is the Al-Meshraq (which is a kind of bench made, allowing men to meet and sit outside at sunrise), another is the barahaa (open space), or inhabitants can simply meet by using the public symbolic elements as reference point for meeting and gathering (i.e., using the settlement’s mosque minarets or main gates as references) (Eben Saleh, 1998; Al-Hathloul, 2010). This paper examines how the various urban elements in the traditional Arab settlements had the effect of creating physical or even virtual/perceived thresholds within the built environment’s spatial order, serving to define and maintain the transition between the public and private domains (controlling points).

The traditional Arab built environment is characterized by its compact urban mass, which enabled its inhabitants to practice four core religious and social principles, Alshuf’a (neighbors’ rights),3 Haq Alirtifaq (easement right),4 the principle of “no harm,”5 and the preference for Alahyaa (reviving the land).6 In fact, these principles are the main mechanisms for the dual macro and micro decision-making processes which led to organize these four principles in a way that complement each other.

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1 All spaces are mixed gender usage except for the mosque which is only allowed for men.
2 Case choices were driven by various considerations, such as availability of raw data, existing literature, whether the site can be visited for site observation, etc.
3 Alshuf’a is an Islamic law which controls buying and selling. The Shuf’a principle, from this perspective, seeks to preserve the interest among different owners, ensuring that “no harm” others from one’s actions. If multiple people are affected by this right, it is not permissible to sell to one person without selling to the rest.
4 The “easement right” is the benefit of a property, such as drinking (from a well), traffic (street), land, etc., located within an owned personal property that the person does not own, but is owned by another person or owned by the entire local built environment. See more (Ar-Rami, 1995).
5 “No harm” is the principle that guides how people engage with each other on a daily basis. It establishes the mindset that one should exercise one’s full right in what is rightfully his, provided that the decision/action will not generate harm to others (Hakim, 1986a).
6 Reviving the land is based on the principle of freedom of action that Islamic law provides to individuals. Alahyaa as a principle of Islamic law of property whereby a person can acquire ownership of land from the State by way of rehabilitating or bringing back to life dead (mawat) land. See more (Ul-Haque, 1984).
The Process of Making Spaces

Observing the built form’s spatial order, including the location of main gates and secondary entrances, as well as the location of public urban elements, it is noticed that several thresholds were generated as mainly hidden boundaries or reference “control points,” which defined the main transitional points in and increased the depth of the urban fabric’s spatial order. These hidden boundaries or reference points work as socio-spatial regulators because people encoded them to refer to transitional zones that separate between two domains (Figure 1).

Two representations were generally identified for how gathering spaces are placed within the built form: one, as a dual-function public space for gathering and acting as a threshold usually located on the borders between the public and semi-private domains and often integrated with a public building (i.e., a mosque); and two, as a threshold space located in the very deep private neighbourhood urban fabric (a hella). The threshold space here is usually used to define the border of semi-private and private spaces within the neighbourhood. The former relates to thresholds acting as the boundary space that separates two defined hellas, while the latter, a dual-functional space acting as a physical and nonphysical semi-public space that connect different parts of the built form and generates another layer of depth between the public and semi-private domains.

The study noticed how the hella (urban mass/neighbourhood) is generated and organized, and how each hella is related to each adjacent hella by producing implicit boundaries defined by the inhabitants. The study’s analysis of the settlements linked these implicit boundaries, for example, when examining how the local mosque functions as an explicit physical threshold between different hellas by its regular daily users (jama’at almasjed). The spatial order supported this process in the traditional Najdi settlements. Therefore, we argue that thresholds play significant roles in regulating outdoor activities and achieving culturally expected levels of privacy (Alnaim, 2020b).

To understand how gathering spaces influence the built form’s spatial order, the study divided the analysis of urban elements into four phases. The first phase is to observe, in general, the public urban elements, and their locations within the built environment by using the Space Syntax Axial Line connectivity map technique. The second phase is to generally identify the possible locations of thresholds within the five settlements after understanding the impact and location of urban elements. The third phase uses the Space Syntax Axial Line integration map technique to understand how these thresholds are an integral part of the settlement’s spatial order. The fourth phase is a micro-level analysis to observe how gathering/threshold spaces can act as dual-functional spaces to integrate or separate between urban forms.

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7 A tightly related group of people who pray regularly in a particular mosque to gather in the Al-Meshraq (outside bench) after Fajer (early sunrise prayer) to practice their public social life.

8 Space Syntax is a useful method for understanding a space or the hierarchy of a space. It can reveal the social meaning of the spatial system and the purpose of buildings (Hillier and Hanson, 1984; Hillier, 2005). The purpose of an axial map is to represent directions of uninterrupted movement and visibility. In an axial map, a set of lines intersect and cover an entire free space which then comprises a map of lines. See more (Hillier and Hanson, 1984; Jiang and Claramunt, 2002).
Urban Elements in the Saudi Arabian Najd Region

Figure 1. (A) Shows the number of main gates in the selected traditional Najdi settlements, (B) How main gates and secondary entrances are linked with spatial order, and (C) The Space Syntax integration map analysis shows how the main gates and secondary entrances are integrated with the urban fabric.

Source: Author.
Phase One: The Location of Public Urban Elements

The different locations observed previously related to the public gathering spaces led to the in-depth analysis of how these spaces were located within the traditional built environment to support its inhabitants’ daily life. In general, this study found that two types of mosques usually appear in traditional Najdi settlements near such spaces. In the first type, the mosque is large and placed on a public street. In the second type, the mosque is medium or small in size and is usually placed on a semi-public and semi-private pathway. The fact that there are two mosque types, and the fact that they are placed within two different domains gives the indication that mosque location conveys the level of privacy of the location and can be a threshold in itself.

The two mosque types are generally identified by the mosque’s location. Where the local mosque (i.e., the daily prayer mosque) is usually located inside or near the hella, the masjid al-jumaa (the Friday or grand mosque) is always located in the public domain and near the centre of the settlement. The size and location of a mosque has symbolic connotations and people usually use the mosque and its minaret as a visual reference to define the location (Figure 2) (ADA, 2015; Hessam, 2016).

One of the interesting customs related to the role of the mosque in the traditional urban order is that local people use the prayer time to invite people to meetings, while the time between prayers conveys the intended length of the meeting.9 For example, if the invitation is to meet after the Megreb prayer (the prayer at sunset), this means that the length of the meeting is likely to be very short because the Isha prayer (the night time prayer) is within one an hour of the start of the meeting. However, if the meeting is after the Isha prayer, it implies that the length of the meeting time is open because the next prayer, Fajer, (the sunrise prayer) is not until ten hours afterward. This makes the mosque location as a gathering space important to support the daily social life of the community.

9 Similar responses addressed in the interviews with local people in the five cases between 2016 and 2018. This leads to the conclusion that daily life is organized around the mosque and prayer time. This may explain how the mosque, as a physical element, is considered significant in the differentiation between the public and private domains.
Urban Elements in the Saudi Arabian Najd Region

The Location of Public Urban Elements and their Relation to the Spatial Order

To understand how the spatial order influenced the public urban elements of the traditional Najd settlements, the study examined the location of the two types of mosques and how each type is integrated with the public and private domains, according to the Space Syntax Axial Line connectivity map technique. The maps reveal that the jumaa mosque is usually placed in a public street (red) and is in close proximity with the souq square (market). The local mosques are located in semi-public and semi-private spaces (brown & yellow) (Figure 3). We observed this phenomenon across the five cases except for Sudus, which is a small settlement and only has one mosque that serves one extended family. Connectivity map analysis demonstrates that the jumaa mosques are situated in higher connectivity streets, while the local mosques are located in less connected spaces in most of the chosen cases.

Urban elements and their correlation to thresholds spaces within the built environment, we argue worked as a dual mechanism to supporting the community’s inherited religious convictions, socio-cultural values, and its social structure, as well as acclimating inhabitants to the local climate and its harsh environmental conditions. The distribution
of mosques within the urban fabric varies among the five cases, but in each case mosque placement serves to support the daily life and Friday prayers of each settlement. This is why several mosques were placed in different areas within the built environment to support social groups that are located within hellas, which makes the daily mosques within walking distance of the inhabitants.

Believers use the jumaa mosque for more than Friday prayer. It also functions as a place of daily prayer for the users of the souq (market) and its surrounding neighbourhoods. The jumaa mosque is associated with the central open space, which causes different people from inside and outside the settlement to use the mosque. In this sense, the souq square (market) and the jumaa mosque are linked, which makes many visitors from the surrounding settlements come to buy and sell goods in the market and pray in the mosque (Alearini, 2010; Al-Ramali, 2011). By grouping the jumaa mosque, the market, and the main open space in one communal area, the boundaries and the spatial limits are defined clearly for outsiders. This is a core concept and it is part of the wider group of common urban core concepts in the traditional Najdi settlements. The local people (men and women) in the region also understand this process as these urban core processes have existed in nearly every settlement, which makes them subconsciously decoded by strangers while visiting another settlement.10

In the local mosque (the daily prayer mosque), this mosque usually has a jama’at almasjed (a tightly related group of people who pray regularly in a particular mosque) to gather in the Al-Meshraq after Fajer (early sunrise prayer) to practice their public social life. In jama’at almasjed, the people usually identify users and the hidden urban boundaries (thresholds) of the hellas that are associated with the mosque. The spatial order where the main sekkak (pathways) lead to the jumaa mosque support these dynamic daily life needs. The size of the jumaa mosque building and the length of its minarets dominate the skyline of the whole settlement and lead everyone to the mosque, which leaves local mosques hidden and identified only by local people (Alnaim, 2020a).

It is important to mention that not all settlements have both jumaa and local mosques. For example, Sudus has only one mosque that combines the two types: jumaa Friday prayer and daily prayer. This is because it was a small settlement composed of seventy houses, and the walking distance to the one mosque was acceptable for all the residents. The difference in use here did not affect the generative process of the spatial order among the five cases, but it is possible to say that the Sudus’ inhabitants exhibited a similar interpretation of the process of producing the built environment, which resulted in a different outcome based on the different circumstances of Sudus. In fact, Sudus is representative of how the Najdi settlements emerged. Although it was the oldest selected settlement, it remained without expansion. As discussed throughout this paper, the Najdi traditional settlements followed a common pattern of limitation in their urban development that was based on the demographic size of each settlement. If the settlement exceeded the limit of its resources, usually a group of families would move and create a new settlement.11

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10 Based on a number of focused groups interviews in Old Riyadh, Alkhabra, Ushaiqer, Saudi Arabia between 2017-2018.
11 A socio-urban phenomenon called “Alkhoboub” which is typically when an area is occupied by one or more families who separated from the earlier larger towns and moved to generate a new one. This is an
Even though the public urban elements contain a **souq** square and a **barahaa** central open space, it seems that the two types of mosques are more significant in influencing and defining the public and private domains. This is because the **souq** and the **barahaa** are only seen in the centre and identified by the majority as public urban elements, while the mosques are distributed in the public and private domains and are associated with urban socializing elements that are mainly used by the inhabitants. Examining the mosque location within the built environment led us to assume that a number of spaces (thresholds) are formed near the mosque. These spaces, we argue, are dual-function and are usually used as gathering spaces in the daytime and at prayer time to integrate as many neighbours in one place as possible. At night, the same space can be used as a space that defines the boundary between a number of private spaces; To be the space that separates or defines the limits of adjacent private domain.

### Phase Two: The Location of the Threshold Space

So far in this paper, the public, semi-public, semi-private, and private spaces identify the organization of the spatial order in the traditional Najdi settlements. These different spaces are essential for defining the boundaries of different domains. These boundaries can take many shapes, such as the different street shapes and forms, the architectural element of **Mujabab**, and the location of a local mosque. However, in most cases, the threshold is mainly nonphysical and mostly hidden, decoded and deeply rooted in the subconscious of the local people. This generative mechanism for how local people engaged with the placemaking process enabled them to use the spaces in a way that didn’t interfere with the cultural settings. We argue that the threshold is part of this process and local people generated it to define their private boundaries and separate them from the interventions of the public activities.

We found that the existence of thresholds contributed to increase the organization of the urban fabric in two ways. First, thresholds created another layer of depth between the different domains, and second, they defined the limitations of street types that provided a link between the different domains. These two ways in which the organization of the urban fabric was produced helped to achieve several purposes including creating a gradual depth between spaces, distributing the density of the spatial order, influencing the pattern of streets, and identifying the location of semi-public, and semi-private spaces (Figure 4). In the following phase, the location of the threshold is examined in more in-depth to understand the different uses of such a reference point.

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12 From a religious point of view, it is preferable to have one mosque for **jumaa** (Friday) prayer in each settlement and an unlimited number of local mosques for daily prayer. The purpose of having one Friday mosque is to bring all the residents of the settlement to one place at least once a week, as well as to protect the spatial order of the settlement and sustain the privacy of its private domains. See more (Al-Zubaidi 2007; Alzahrani, and Eisa, 2007; Alajmi, 2010).

13 They form the area or place that is open, accessible to all peoples, and connect different zones within the built form, regardless of gender, race, ethnicity, age, or socio-economic level. That is why it is argued that this space may form kind of spatial organization.

14 A **Mujabab** (pl. **Mujabibat**) is a bridge room architectural element between two houses, often seen above the street.
The objective is to identify how the concept of the threshold is an integral part of the built form’s spatial order.

![Figure 4. Threshold gradual depth in the traditional Najdi settlements. Ushaiqer settlement. Source: Author.](image)

**Phase Three: Thresholds as a Space of Integration and Separation**

By using the Space Syntax Axial Line integration map technique, the way in which thresholds are located is examined as well as identifying the domain to which each threshold belongs (Figure 7: B). Typically, the maps show that thresholds are found in the semi-public or in semi-private spaces. The semi-public streets that have high to medium traffic generated threshold references to mediate the density of the street (red or brown) (Figure 7: B1, 2 & 4), while in semi-private pathways that have lower density traffic, the threshold spaces were located to define the boundaries between the housing clusters within the neighbourhood (yellow or green) (Figure 7: B3 & 5). The fact that thresholds are located at these two types of spaces supports this study’s argument that the threshold reinforces the gradual transition of spaces that either integrates or separates the public and private domains (see Alnaim, 2020b).

This paper sees the concept of threshold as a social concept which sometimes has a physical representation. Amos Rapoport argues that place and space could contain symbolic connotations, cognitive/cultural space, or social space, each of which can embody different meanings associated with how people made use of these places and spaces (Rapoport, 1977). Rapoport’s argument is related to what is meant by thresholds as integration and separation spaces as Rapoport posits that a threshold has a hidden meaning in that it can become a meaningful concept only when the inhabitants understand the particular use of it (Also see Sait, and Lim, 2006). This makes the concept of thresholds depend on how people experience and perceive the space (Figure 5).
To support this argument, we made use of the results of an interview with a Saudi professor conducted in 2017. The interview discussion focused on the importance of open spaces in the traditional built environment. From the professor’s childhood experience, as he lived in one of the Najdi traditional settlements, he recalls that he usually played in an open space placed between two hellas nearby his family’s house. As a child, he considered the surrounding space as his limit in interacting with the external domain. He mentioned that the importance of this space was significant to him, as it brought him and his friend from a different hella into one space. The open space was accessible to him and other young neighbours all day due to the supervision of well-known neighbours who knew him and his family and the other young people and their families. In fact, thresholds that separated the common playing spaces from the family private spaces defined his play space well.

For him, the playing space was a semi-private space that protected him from outer and larger public spaces by having another threshold (in semi-public) that defined the boundaries of spaces he should occupy. However, the same space was also a threshold space that integrated two hellas which means that one can encounter some thresholds from different perspectives. One perspective is the definition of the internal spaces within one domain while the other perspective is the definition of the separation or integration points between different domains. The importance of the shared meanings is to maintain the cultural settings while individuals can establish a meaning for themselves and shared with their own families without disturbing the shared one. This means that the concept of a threshold is both physical and nonphysical which makes it a dynamic mechanism that gave the inhabitants the ability to generate references to enable them to define their spaces individually (among the family members) and collectively (across the entire community).

A developed schematic graph shows how the thresholds serve as a concept that simultaneously integrates or separates public and private spaces. Two key concepts simplify the complexity of the concept:

First, the threshold is usually considered a semi-public space that separates public and semi-private spaces (Figure 6: A). This threshold appears when the semi-private spaces or private hellas are nearby the souq square (market). The purpose here is to create a layer of depth that gradually separates the most private spaces from the most public

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15 We asked if we can provide his name and he preferred to make it anonymous as it was a conversation related to his own personal life. An interview in his private home in Riyadh 1/9/2017
spaces. This process generates a semi-public threshold. We observed the threshold across the five cases, but it is most apparent in old Riyadh, Alkhabra, and Ushaiqer. Second, the threshold is usually located in semi-private spaces and acts as a hidden boundary to separate two hellas (Figure 6: B). This threshold space appears between two hellas in the semi-private domain to define the boundaries of each urban mass. It is in this threshold that semi-private open spaces or local mosques are observed most often. The importance of this threshold is that it has dual transitional meanings, either integrating or separating two different hellas. These generated meanings depend on the social activities of the two hellas and level of interaction between the hellas. While we observed this threshold across the five cases, it is most apparent in Ad-Diriya, Ushaiqer and Sudus.

Figure 6. A schematic representation to examine the functions of a threshold Source: Author
### Figure 7. Examining the threshold level using the Space Syntax Integration Maps method to examine the distribution of thresholds in the traditional Najdi built environment. Source: Author.

<table>
<thead>
<tr>
<th>Cell</th>
<th>old Riyadh (1)</th>
<th>Alkhobra (2)</th>
<th>Al-Diriya (3)</th>
<th>Unheiger (4)</th>
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- **Public Zone**: ○
- **Private Zone**: ●
- **Threshold**: △
- **Gate**: □
- **Higher Integration**: ▶️
Phase Four: The Implicit Meanings of The Threshold Space

The locations of thresholds and their possible associated meanings in the traditional Najdi settlements were examined, and it was found that a threshold is either a physical or a nonphysical reference point that is located in one of two positions. The first position is at the edge of two different domains, serving to separate them by defining the border between them. The second position is within a particular domain, integrating or separating two urban masses (Figure 7). The spatial order, the location of the settlement’s main gates and secondary entrances, and the central public urban elements determined which type of buildings and activities were placed in particular spaces. This means that the organization of the urban spatial order encourages circulation on public streets, which enables the semi-private and private cul-de-sacs to appreciate lower traffic levels. In this connection, the placement of the threshold is between the higher and lower traffic streets to mediate the direct link between the public and private streets. In this sense, the threshold location here is intended to enable the private domain to engage with its private spaces while the public spaces are occupied (Figure 7: A).

In the case that the thresholds are located inside the private domains, these spaces are usually located between two hellas, and either a local mosque or small semi-private open space serves to define these thresholds. The threshold, in this case, is acting as an implicit boundary that local people identify and decode. The boundary here is presented physically as open space or a local mosque that is shared between two hellas, but most importantly, its nonphysical meaning indicates the permitted and unpermitted areas that people can use or enter. This is important as not all thresholds in the settlements are presented physically as they can be a regular semi-private pathway between two hellas. This semi-private pathway is acting as a nonphysical threshold that embodies meanings that function to either integrate or separate the space between the adjacent hellas. In fact, the concept of threshold, then, is not necessarily well-defined open space which makes the implicit meanings that the inhabitants share and agree upon more significant in establishing those reference points within the built environment.

In general, the spatial order and the careful placement of urban elements supported the concept of the threshold. A threshold functions to control the limits and define the borders of different spaces, while maintaining respect for the social structure, and creating another layer of depth in the spatial order. The threshold is a space that integrates different spaces controlled by different domains to increase the homogeneity of the urban fabric or function as a space that increases the separation between the public and private domains. Also, the threshold can have physical or nonphysical references that define the end of one space and the beginning of another. This diversity in the shape and nature of thresholds indicates how this device was used widely as a regulator and organizer of spaces and architectural components in the traditional Najdi built environment.

Conclusion

Examining various processes of interpretation related to the urban elements helped to identify several processes with different embedded meanings that directly influenced the traditional Najdi built environment’s spatial organization. These elements followed a specific process in generating forms and spaces while having some flexibility in integrating with the urban form. This was possible as the two levels of the decision-
making process – the macro and micro levels – increased the possibility for the Najdi local community to be involved in the concept of placemaking. This is because at the macro-level, the impact was minimal, and inhabitants made most of the decisions that shaped the traditional Najdi built environment and maintained its existence within the shared and agreed upon spatial order at the micro-level. This, in fact, produced a very similar, but not identical process of generating spaces and forms across the five cases, which led the inhabitants to produce elements that implicitly communicates, where the communication reflects and influences the organization of space and meaning. Place, which constitutes a space, is a social production and any neglect of human practice will affect the tracing of spatial representations, spatial practices, and the physical representation of spaces. Gathering places and public spaces in the Arab world must be redefined and must be more aligned with socio-cultural priorities and values. Lessons presented in this study showcased how the mosque can be both a place of reference as well as a space that accommodates religious and social rituals. That said, one of the main challenges in the contemporary built environment is to reengage people’s participation (especially participation of children, youth and women) in the decision-making process and enable them to reflect their collective interests in their living spaces. The dual relationship between the location of urban elements and gathering spaces can help the people to reproduce/infuse their socio-cultural values and priorities into their shared built environment while also responding harmonizing with their surrounding natural environment.

What is clearly noted in this paper is that the physical elements and spaces of a community must integrate with should parallel with people’s needs values and beliefs. The scale of the contemporary built environment and the diversity of its people’s values, interests, and visions, as well as the vast advancement in building technology are drastically different from those of the traditional Najd settlements. However, the opportunity exists to learn from the past, infusing modern communities with similar abilities to clarify the use and perception of space from public to semi-public, to semi-private, and private, through the use of thresholds, thereby increasing the quality of space and quality of life enjoyed by contemporary communities.

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**References**


Public Spaces as a Venue for Peacebuilding in Lebanon. The Role of Civic Movements in Reclaiming Public Spaces in Beirut and Tripoli

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Abstract
The issue of public spaces is increasingly at the core of civic movements and discourse of reform in Lebanon, having come to the fore most recently in the mass protests of October 2019. Yet, these most recent movements build on years of activism and contestation, seeking to reclaim rights to access and engage with public spaces in the face of encroachments, mainly by the private sector. Urban spaces, including the country’s two biggest cities – Beirut and Tripoli – have been largely privatised and have become the preserve of an elite few, and post-war development has been dogged by criticism of corruption and exclusivity. This article explores the history of public spaces in Beirut and Tripoli and the successive civic movements that have sought to realise rights to public spaces. It argues that reclaiming public spaces is central to reform and rebuilding relationships across divides after years of conflict as a cornerstone of peacebuilding efforts. First, the article describes the evolution of Lebanon’s two main urban centres. Second, it discusses the role of the consociation system in the partition and regulation of public spaces. It goes on to describe the various civic movements related to public spaces and examines the opportunities created by the October 2019 movement. It then interrogates the limits imposed by COVID-19 and recent crises. Lastly, it explores how placemaking and public spaces can contribute to peacebuilding, and concludes that public spaces are essential to relationships and inclusive participation in public life.

Keywords: public spaces, civic movements, peacebuilding, urban development, Lebanon

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Fragile foundations – an introduction to urban spaces in Lebanon

The factors shaping urban fragility or safety are diverse; they include institutions, norms, economic opportunities and inequalities, infrastructure, and behavioural attitudes (Altpeter, 2016), which interact to shape the extent to which urban public spaces are safe, accessible and inclusive to all.

In Beirut and Tripoli, stability and safety rest, to a large extent, in the hands of influential networks that benefit from the weakness of the formal institutions to provide services and security. The result is urban spaces where dominion is divided between the state and informal networks. Often, the security situation in cities is seen as a direct outcome of the presence and the performance of state institutions, or the lack thereof (Altpeter, 2016). In that sense, fragility relates less to physical threats and more to indirect forms of violence that are reproduced along collective beliefs, values or norms, and impact how people relate to each other within societal and institutional structures leading to inequality, discrimination and injustice (Reyes, 2015). Examples of such fragility in both cities can be traced to the common practice of private security and valet parking firms limiting access to public spaces, such as sidewalks and parking spaces, with the tacit approval of the state (Kanafani, 2017), or to restaurants and bars taking over sidewalks and limiting people’s spaces for walking freely.

Public spaces are defined as all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive and they consist of open environments (e.g. streets, sidewalks, squares, gardens, parks) and sheltered spaces created for everyone’s enjoyment (e.g. public libraries, museums) (Biennale Spazio Pubblico, 2013). They are thus instrumental in contributing to urban development and preserving cities’ social fabric. Public spaces and social movements are interconnected and the nationwide movement of October 2019 is a manifestation of how people’s relation to public spaces and democratic practices play out to shape urban development.

The streets and other shared spaces are increasingly acknowledged as hitherto underexplored vectors for peacebuilding where ideas and values are negotiated and contested (Bollens, 2006; Altpeter, 2016). The juxtaposition of movements reclaiming space in a context of increasing restrictions imposed by the COVID-19 pandemic has underlined the imperative to rethink the use of public spaces.

The politics of public spaces

Lebanon’s consociation model of democracy places great emphasis on negotiation among political elites, whose role is seen as central in moderating inter-group conflicts as they represent the major religious sects in Lebanon. The elite is committed to preserving this power-sharing system through engaging in a series of exchanges of services provided by politicians in return for popular support. The result is continuous negotiations among the elite to maintain supremacy, and networks of supporters that thrive on political clientelism. These bargains extend to physical and political encroachments on state assets and public spaces.

The civil war military groups later became part of post-war governments after 1990, splitting executive power among themselves and making these encroachments either directly or through their clientelist networks. They legalised the encroachments and allowed random construction by such clientelist networks for profit. Beirut is thus
losing its architectural heritage and cultural buildings, which are being replaced with towers and cement buildings, a trend that started after the end of the civil war.\textsuperscript{1} Clientelism has limited technocratic ability to have a long-term and nationwide vision of urban planning. In 2018, Public Works, a Lebanese research and design studio that works on urban and public issues, conducted an urban planning review, which indicated that unplanned land accounted for 85% of the territory mapped. It identified “how factors such as law, property, identity, and interests contributed to displacing people’s imagination, social fabric, livelihoods, and sometime entire neighbourhoods”. (Public Works, 2018).

**Evolving public spaces in Beirut and Tripoli – urbanisation and privatisation**

*The ‘rise’ of Beirut as an urban centre with a war legacy*

Modern-day Beirut is largely privatised (Monroe, 2016). The city’s green spaces have also shrunk over the past decades, with only Horsh Beirut open to the public at specific times of the day. The other few open areas around Downtown Beirut are designed with modern structures and remain of very little use to the average citizen. The country’s coastline has been vastly privatised by beach resorts. The only remaining public beach in Beirut, Ramlet al-Bayda, is under constant threat of encroachment by real estate developers, leaving people with limited access. A lack of regulation of wastewater management has also rendered it among the most polluted beaches in the country, which prevents residents from using it.

Many of Beirut’s current public spaces and past battlefields overlap, and the interactions between its inhabitants in those spaces are defined by their memories and experiences of the political and sectarian violence of the civil war; such memories have never been resolved and are perpetuated by the country’s ever-frail political climate.

The development of Beirut as an urban centre dates back to the Ottoman period (1860–1914) when the city gained prominence as an economic hub, attracting foreign investments and increasing rural-to-urban migration (Monroe, 2016). Before that, successive civilisations, including the Canaanites, Phoenician, Hellenistic, Roman and Islamic, all left their mark on the city’s landscape (Jehl, 1997). Throughout the nineteenth century, rural migrants transformed Beirut from a small town into a major seaport economic hub on the eastern Mediterranean (Fawaz, 1983). Many of these migrant families kept ties to their villages, facilitated by the development of roads. However, in a socialisation sense, they had become ‘Beirutit’, as in residents of an urban polity that is governed by a municipal council rather than by the charitable religious institutions, sectarian communities and feudalism that comprised village life (Abou-Hodeib, 2011).

During the French colonial period, Beirut became the centre of French culture, with many streets and squares renamed after their military men. The city’s Downtown centre was a focal point for the mandate authorities, and so its design and use were imposed by the French colonial authorities (Monroe, 2016) creating boulevards and buildings imitating Paris’s streets. Government and residential buildings, such as those in the Achrafieh neighbourhood in east Beirut, gave the city a distinctly French character.

\textsuperscript{1} Interview with Mohammad Ayoub, Director of the Lebanese NGO NAHNOO that advocates for public spaces in Lebanon, conducted by Aseel Naamani on 7 July 2020 in Beirut, Lebanon.
By changing the city’s layout, the French authorities enacted a system of spatial control, with wide, straight boulevards radiating from the squares, which enabled surveillance, military movement and crowd control (Rabbat, 2012). Urbanisation and economic development in Beirut also brought a new sphere of public life, one that was characterised by cafes, theatres, clubs, public gardens, horse racing viewed from within a European-style hippodrome and roads designed for automobiles. Parks, such as Horsh Beirut, acquired features of French royal parks, which were gated, fenced and closed to the public. The Corniche, Beirut’s seafront promenade built during the French mandate, remains one of the few functioning, diverse and vibrant public spaces in the city (Nazzal and Chinder, 2018).

Despite its reputation as a thriving urban hub, following Lebanon’s independence in 1948, modern Beirut started acquiring a chaotic physical appearance. The civil war militiamen took over public spaces between 1975 and 1990 and turned them into battlefields. This practice continued after the civil war when militiamen became part of successive governments, and institutionalised the division of state properties among themselves with the practice of political apportionment (muhasasa). Infighting between them exacerbated the city’s haphazardness with their support for private encroachments on the public sphere shrinking public spaces. Since then, two processes have been the key drivers shaping the city’s public spaces in modern times: modes of privatisation nourished by a laissez-faire market-led model of urban development; and political sectarian conflict (Monroe, 2016).

Reconstruction efforts in post-war Beirut were launched in 1992 and spearheaded by Solidere, a corporation that was owned by Lebanon’s former Prime Minister the late Rafik Hariri, and now owned by his son, former Prime Minister Saad Hariri. While the corporation was cited by several planners and architects as an example of how the private sector has been more efficient than the state in improving urban spaces (Monroe, 2016), it is also being criticised by detractors and civil society activists for stripping Beirut’s public spaces of their original meaning and function: to provide a habitable environment that reflects the city’s cultural identity. The presence of private security guards across Beirut’s Downtown and souks, rather than municipal police, render it a private, not a public space (Nazzal and Chinder, 2018).

Solidere’s post-war reconstruction works reinvented the city’s historic core – currently known as Beirut’s Downtown and comprising the neighbourhoods of Bab Idriss, Mina el-Hosn, Wadi Abu Jamil and Al Borj Square (commonly known as Martyrs’ Square), and others – making it into a separate enclave, abruptly severed from the rest of the city by a network of highways that constitute solid physical barriers (Ghandour and Fawaz, 2010). After the war ended, there was no work carried out by the state to reconnect people to their cities and hometowns and encourage social interactions in public spaces.

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2 Interview with Mohammad Ayoub, 7 July 2020, Beirut, Lebanon.
3 Interview with Mohammad Ayoub, 7 July 2020, Beirut, Lebanon.
4 Ibid.
5 Interview with Rony Jalkh, an expert and activist on placemaking and Director of Placemaking MENA NGO, conducted by Aseel Naamani on 7 July 2020 via Microsoft Teams.
Tripoli, a ‘forgotten’ hub of public spaces and cultural heritage

Like Beirutis, Tripolitans' connectedness to their city has changed over the past decades. The civil war and successive armed clashes displaced people and destroyed many of the city’s public spaces and green places. After the civil war ended in 1990 and the three-year armed clashes between Tabbaneh and Jabal Mohsen came to an end with a government-enforced ‘security plan’ in 2014, Tripoli did not see any government effort to put together a social development plan to revive a city that is rich in resources, and to allow for public spaces connecting disintegrated Tripolitans from the old and new parts with each other.

Situated approximately 85 kilometres North of Beirut, Tripoli is considered Lebanon’s second capital, the economic hub of the North and Akkar governorates, and a centre of cultural heritage that is characterised by physical degradation. Years of armed conflict, coupled with decades of government neglect and underdevelopment (Louis Cardahi Foundation, 2004), have led to poverty, unemployment and a dilapidated urban fabric, compounded by high levels of environmental and acoustic pollution. Furthermore, conflicts, poverty and rural–urban migration led to internal movements of the richer inhabitants of old Tripoli to the newer parts, while the old city became host to rural and lower-income families from the poorer areas of Akkar, Minieh and Dennieh, in addition to Syrian workers and refugees (UN-Habitat, 2016).

With several successive civilisations having left their cultural mark on Tripoli – Hellenistic, Roman, Byzantine, Crusader, Mamluk, Ottoman – the city has a distinctive cultural and historical character. Its varied historical and cultural sites include Crusader and Mamluk towers in the al-Mina area, the St Gilles citadel, and a series of madrassas,
hammams, khans and mosques in the historic core (Louis Cardahi Foundation, 2004), or what is today known as Old Tripoli (see Fig. 1). More modern cultural edifices comprise of the uncompleted Maarad area, designed by Oscar Neimeyer, one of the most important figures in modern architecture. Construction of this monument, which began in the 1960s, was disrupted by the civil war, and remains unfinished. In contrast to Beirut, Tripoli’s streets allow more breathing space with wider sidewalks, greenery and pedestrian spaces (Nazzal and Chinder, 2018).

The latest survey of Tripoli’s historic monuments was carried out in 1995. It classified a total of 190 monuments – most of which are in Old Tripoli – and their immediate surrounding urban environments to be protected. These classifications were never enacted due to competing interests in ownership and the remaining areas being unprotected and thus open to modifications within specific limits set by the municipality (Information International, 2001).

Despite its abundance of cultural heritage, Tripoli is a fragile city characterised by physical degradation that is affected by poor urban planning and encroachments on public spaces. The old city lacks proper lighting and wastewater disposal. The Qadisha river, which already has low water levels, is polluted by household and vegetable market sewage outlets opening directly onto the river. Inadequate parking facilities, informal and illegal street vendors, and the absence of landscaped areas have contributed to the visual and environmental chaos of the city (Information International, 2001). Modern infrastructure projects and private resorts along Tripoli’s coast have encroached on the

Figure 2. Buildings in the Old Tripoli downtown, al-Tall Square, built during the French colonial time. Photo credits: Malek Haddad.
maritime public properties, limiting free accessibility to the beach and posing dangers to the maritime ecosystem.

Several factors contribute to Tripoli’s status as a fragile city despite several projects by UN-Habitat to support Tripoli municipality in reactivating its wide array of public spaces, including working with the municipality on providing data on the old city, profiling its neighbourhoods and supporting the development of a strategy on reactivating public spaces or guiding other civil society initiatives for similar interventions. Widespread poverty and marginalisation of the old city, according to the municipal council, limit their ability to ensure communities’ acceptance for implementing its strategies.6

Stereotypes of Tripoli as a hub of instability have been perpetuated in reports across media, pinpointing the 2011–2014 clashes between Tabbaneh and Jabal Mohsen – two of the poorest neighbourhoods in Tripoli. As a result, inhabitants of both neighbourhoods have felt marginalised from the rest of the country and alienated by other Tripolitans residing in the new parts of the city, resulting in fragmentation of Tripoli’s social fabric. The current centralised system adds to this sense of marginalisation, particularly in terms of lack of infrastructure and socio-economic development projects, and security. Implementing the law on decentralisation of administrative governance may offer a way to redress this centre–periphery imbalance, whereby municipalities would have greater autonomy in making decisions related to public services.

Protesting encroachment on public spaces: the role of Lebanon’s civic movements in reclaiming public spaces

Democracy thrives in public spaces, and civic movements have almost always started there. While privatisation of public spaces was historically normalised, a newfound awareness arose with Lebanon’s civic movements in 2008, and more recently with the October 2019 protests. Access to public spaces has not tended to be the primary focus of civic movements; however, “the way in which [civic movements] have used public spaces to come together, interact, and voice their opposition to government policies is by itself indicative of an elevated awareness as to the importance of public spaces in civic life”.7

Public spaces in Beirut and Tripoli have historically been a place of social, political and religious congregations, and they are usually influenced by what makes up a community’s collective culture, including religion, geography, gender and age, as well as internal migration, colonialism and security surveillance. As such, religious institutions have historically been an integral part of public spaces. Mosques and churches were deliberately built very close to public spaces to attract people in.8 Villages still have public and communal spaces for social gatherings, which are normally at the centre of the village and accessible to most homes, aiming to foster social interactions, political debates and intellectual discussions.9

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6 Interview with Samer Chinder, Maryam Nazzal, and Wael Sinno, staff with UN Habitat Lebanon who have worked on public spaces in Beirut and Tripoli, Lebanon, conducted by Aseel Naamani on 6 July 2020 in Beirut, Lebanon.
7 Interview with Rony Jalkh, 7 July 2020, Beirut, Lebanon.
8 Interview with Mohammad Ayoub, 7 July 2020, Beirut, Lebanon.
9 Ibid.
Squares in Beirut and Tripoli assumed civic meaning in the early twentieth century with nationalist revolts against the colonial rulers. Such squares were seen to be “consecrated by the blood of locals” who clashed with the colonial forces to demand independence, or by the execution of national leaders by colonial forces (Rabbat, 2012). Thus, such squares were given names that commemorated martyrs (for example, al-Borj Square in modern Beirut Downtown was renamed Martyrs’ Square in 1916) or celebrated national leaders (such as Riad al-Solh and Beshara al-Khoury squares in Beirut, and Abdelhamid Karami Square in Tripoli, commonly known as al-Nour Square). After the country gained independence in 1948, many of Lebanon’s squares were used as places for national celebrations and contestation alike.

The 1990s to mid-2000s – the period comprising the end of the civil war and the start of the Syria hegemony over Lebanon – saw less political and civic mobilisation in public spaces (Bray-Collins, 2016). During this period, the mobility of middle- and upper-class youth, who grew up without direct experience of the civil war, transcended the city’s political and sectarian considerations defining its neighbourhoods’ geography and seemed to be “motivated by cultural and consumer sensibilities and leisure practices” (Monroe, 2016) rather than by political and sectarian positioning. Open and accessible public spaces, being scarce in Lebanon, were unavailable to such youth and such interactions were made in private or closed realms, including private and public schools and universities.

For less privileged youth, mobility was significantly defined by the extent to which they have the financial capital to move outside their neighbourhoods and around the country. For this reason, their mobility was driven by the location of their education or workplaces rather than by recreational activities. In a way, universities and workplaces, while not gaining the status of a public space, did function as open social settings that allowed for free communication, without the shackles of censorship about matters concerning culture, society, politics or any subject of public concern. As such, public life retreated from urban public spaces to private ones, and civil society and youth political life could only be conducted in private realms, most notably universities, which generally allowed for vibrant political activism with the presence of youth wings of political parties on-campus, even those that were banned from actual political life and executive power at the time. Democratic life was manifested at its best and elections for student bodies were the norm, organised by youth wings of political parties and independent activists. Political and civic activism thrived; although it was away from its natural places – state institutions and public spaces – it gave rise to a vibrant civil society during the early 2000s.

As a result, civic and political movements gained momentum and used urban public spaces to organise demonstrations that were triggered by political and economic grievances against the political elite. Such mass movements, which started with the 2005 protests following the assassination of former Prime Minister Rafik Hariri, included the 2015 #YouStink protests in response to the solid waste crisis (Bray-Collins, 2016) and the most recent ‘October Protests’ in 2019.

Civic movements contributing to an elevated popular awareness on public spaces

Public spaces are not only congregation spaces; they are streets, open public spaces, public facilities and markets, which provide the setting of community life and livelihood of the urban poor (UN-Habitat, 2018). Their importance lies in their function of
providing a habitable environment that reflects the society’s cultural identity, and their use has been central to civil society movements since 2015.

People’s inalienable right to access public spaces captured the general public’s attention following the 2015 protests in Downtown Beirut when the head of the Beirut Traders Association said that the presence of regular protests in Beirut’s Downtown was “cheapening” the area (Battah, 2015). His statement encapsulated an entitlement to that part of Beirut and served to reinforce the perception that the average citizen was not welcome. In response, protesters gathered in Downtown Beirut’s Riad al-Solh Square to set up a flea market. They satirically named it ‘Souk Abou Rakhouse’, which is Lebanese slang for ‘the cheap market’. For the generation who lived in pre-war Beirut, the market was reminiscent of a time when the public felt the city belonged to them. Since then, young people have increasingly been voicing their opinions, via blogs and social media, as well as by actively mobilising in groups and networks, with the aim of making their cities more liveable. Nonetheless, such groups are often fragmented with differing understandings of, or priorities related to, public spaces. Some favour visual beautification in their work, while others are disseminating a critical understanding of public spaces according to Lebanese laws and initiating a debate about reclaiming them. One example is the campaign led by NAHNOO, and launched in 2011, to reopen Horsh Beirut – the last and largest green space in Beirut, which has been closed to the public since the civil war. The campaign aimed to re-establish it as a public space for all and to reintegrate it into the city’s daily life, transforming it into a venue for fostering social interaction between individuals and across communities. Years of lobbying politicians, ministries and Beirut municipality, as well as outreach and awareness-raising activities, culminated in el-Horsh’s reopening in September 2015, initially on Sundays only, until it finally reopened fully to the public in July 2017.

The campaign, however, was met with pushback from authorities that “develop narratives, strategies and mechanisms to naturalise their dominance over the city and its public spaces, and their exclusion of ordinary dwellers, especially poor and marginalised groups” (Dikeç, 2002). In that sense, the political elite and their clientelist networks had used excuses such as building public hospitals and widening roads to justify encroachments on el-Horsh. Additionally, a major obstacle to civic movements is counter-lobbying by the private sector who are generally well connected to the elite. Clientelism, nepotism and corruption, which have allowed such encroachments for years, remain a main target of civic campaigns and a key sticking point. The el-Horsh campaign was no exception and activists relied on messaging and communications when reaching out to decision-makers and establishing working relations, while raising awareness to put public pressure on them.

Other claims on spaces are organic and uncoordinated, such as cases of children and youth in Beirut suburbs claiming empty lots as recreational spaces, where surrounding

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10 Interview with Mohammad Ayoub, 7 July 2020, Beirut, Lebanon.
11 Interview with Abir Saksouk-Sasso, architect, urban planner, and researcher with Public Works Studio, a Lebanese research and design studio on urban and public issues in Lebanon, conducted by Ruth Simpson on 15 July 2020 via Microsoft Teams.
12 Interview with Jessica Chemali, Deputy Executive Director of Legal Agenda, a Pan-Arab NGO specialized in research and advocacy on law and society, conducted by Ruth Simpson on 17 July 2020 via WhatsApp.
13 Interview with Mohammad Ayoub, 7 July 2020, Beirut, Lebanon.
neighbourhoods share these spaces for picnics, sports and other leisure activities. However, these are under threat. An aerial mapping of these lots showed that 85% of them had been encroached on by private real estate in recent years, putting immense pressure on communal and public spaces.¹⁴ Such informal spaces offer marginalised children and youth, including refugees and migrant workers, with no access to private youth clubs or other recreational spaces a rare opportunity for interaction and developing social interactions.

Demands on, access to and use of urban public spaces differ based on gender, age, socio-economic status and other social and identity markers. Discourse around the intersection between gender and public space in Lebanon is growing in academic literature and includes projects on gender and women’s engagement in urban planning and reclaiming public spaces, among other initiatives (Batakji, 2020; University of Sheffield, 2020). Such discourse is also important in social movements, especially with the frontline role women played in the October movement. For example, women in the Sassine area of Beirut have highlighted street lighting (for safety) and pedestrian accessibility (for walking in daylight hours) as areas of concern¹⁵ (Melki, 2019).

The October movement – an opportunity to reclaim public spaces and a catalyst for interaction?

One of the gains of the October movement is that it brought debates out of the private realm of universities and intellectual circles and into public spaces, and fostered interactions among the cities’ diverse social fabric (Fawaz and Serhan, 2020). Before the October movement, many protestors would not access these areas. More marginalised citizens, including those who would be stigmatised as homeless, substance abusers, ‘hooligans’ or ‘outsiders’, were able to join in reclaiming many of the public spaces through arts, culture and dialogue. They contribute to the historical and cultural discourse of the country through community artwork (Naamani, 2019). Arts, culture and dialogue successfully connected excluded groups to the remaining constituents of the cities’ social fabric and contributed to rebuilding such groups’ self-confidence to reclaim public spaces that have long been abandoned or made accessible only to the social elite. On 17 October 2019, people across Lebanon took to the streets in massive popular demonstrations sparked by an economic crisis (see Fig. 3). Citizens from all walks of life gathered in public spaces in Beirut, Tripoli and other cities, and in peripheral villages that normally saw little civic movements. Protesters (re)discovered previously exclusive spaces, and public spaces embodied a “new concrete meaning”¹⁶ for those who participated, the young people especially, and became catalysts for interaction, political discussions and informal learning.

¹⁴ Interview with Abir Saksouk-Sasso, 15 July 2020 via Microsoft Teams.
¹⁵ This data was collected prior to the Beirut seaport explosion.
¹⁶ Interview with Jessica Chemali, 17 July 2020 via WhatsApp.
Unlike in previous demonstrations, mounting economic grievances, precipitated by Lebanon’s severe economic crisis, explain why the 2019 protests were able to garner a sustained presence in main public squares from across geographical, sectarian and political divides. While activist groups perceive economic demands as the driving factor behind their movement, they believe that, once rights are attained and grievances resolved, this will lead to achieving higher gains, including reclamation of public spaces. In previous demonstrations, Downtown Beirut would return to its usual high-end restaurants and shopping and entertainment centres, but the October protests were different, as protestors continuously filled its spaces and organised cultural activities and political debates (Fawaz and Serhan, 2020). In that sense, protestors transformed such public venues into revived platforms for debate, echoing across social media with the hashtag #ReclaimingThePublicSpace. Other claims on public spaces were symbolic, with protestors blocking the highways that serve as arteries in and out of main cities across Lebanon. Some even set up a living room and others organised yoga classes and football games on the highway connecting Hamra to Achrafieh, aiming to make the clear statement that these spaces belong to them.

17 Interview with Samer Chinder, Maryam Nazzal and Wael Sinno, 6 July 2020 in Beirut, Lebanon.
18 Ibid.
Arts were also used as a means of expression by protestors, as acts of transgression and as counter-hegemony (Fawaz and Serhan, 2020). In the streets of Downtown Beirut, one would pass graffiti artwork (as in Fig. 5) and caricatures portraying the elite’s detachment from the daily struggles of the Lebanese people. Across cities, artists would congregate and create in reclaimed spaces. From the abandoned Grand Theatre in Downtown Beirut, Soprano singer Mona Hallab, from Tripoli, and her friend shot a video showing Hallab singing the lyrics of a song written by another protestor, praising the newfound unity among Lebanese (see Fig. 6).

“I’ve always heard of the Grand Theatre, and as a citizen and soprano singer, it has always been upsetting for me that Lebanon is one of the very few Arab countries that doesn’t have a functional opera house. We wanted to make a statement that some places belong to the people and should go back to the people; this is one of our legitimate rights. This is why going in there and singing, even without audience was a small but very meaningful victory to me.”

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19 Interview with Mona Hallab, artist and activist from Tripoli who resides in Beirut, Lebanon, conducted by Aseel Naamani on 3 November 2019 in Beirut, Lebanon.
Figure 5. Graffiti drawing in Downtown Beirut during the October protests. Photo credits: Aseel Naamani.

Figure 6. Hallab singing from inside the Grand Theatre, October 2019. Photo credits: Marie-Rose Osta.
Tripoli was named ‘Arous el-Thawra’ (Arabic for ‘Bride of the Revolution’) because of the scale, vibrancy and sustained nature of the demonstrations. There were nightly events with DJs and famous Lebanese singers alongside tents that hosted debates and discussions, child-friendly activities and a communal kitchen. By shedding its hitherto conservative persona, and with its public spaces coming alive, Tripoli was challenging the idea of the exclusivity of civic movements, culture and arts to Beirut.

Youth groups in Tripoli transformed the use of al-Nour Square following approaches embedded in placemaking (see Fig. 7). They worked in a participatory manner with other protestors to identify the objective of the new public space and test its function before setting up their tents and activities. This concept is based on the premise that any change introduced to a public space is temporary and should regularly be tested by the communities using it, and if it stops serving its objective then it should be remodelled. Youth protestors became more aware of laws governing and defining public spaces, which was a cornerstone in their understanding and respect of their essential
function: a function that implies enabling safe and inclusive access to all. Youth in Tripoli used this and other placemaking concepts to keep al-Nour Square vibrant with protestors.20 Through the October movement, young people transformed public venues into platforms where dialogue and arts were used as tools of empowerment to overcome confessional barriers. They organised public debate sessions to make a statement that these venues belong to them and their stories (Naamani, 2019). Such initiatives showed an unprecedented level of awareness by protestors of the use of peaceful methods and the adoption of a more critical perspective towards conflicts, enabling them to envision peaceful ways to play a valued socio-political role.

Post-October 2019, economic crisis, COVID-19 and implications for inclusive public spaces and social connections

Nearly two years from the beginning of the nationwide protests, Lebanon is grappling with economic, fiscal and political crises, aggravated by the onset of a public health emergency, the COVID-19 pandemic since February 2020, and the ramifications of the Beirut seaport blast that rocked the country on 4 August 2020. The country went into a nationwide lockdown in mid-March, which has eased gradually and intermittently since then. The healthcare emergency (both the fear of the pandemic and the lockdown measures) had significant impacts on the dynamics created during the October protests in relation to public spaces on three main fronts. First, COVID-19 restrictions have limited access to public spaces, and have been used to act against protests and securitise public spaces; second, the intersecting economic and COVID-19 crises stalled the protests; and, finally, lack of public spaces and infrastructure in urban centres impacts the ability for safe social distancing (Nobajas et al., 2020). While it is widely agreed that decisive action was needed to respond to the pandemic, many also suspect that COVID-19 and the declaration of a State of Emergency in the capital following the Beirut explosion were used as pretexts for dismantling the protest infrastructure in public spaces set up in October 2019. The presence of security forces and restrictions imposed during the pandemic provided an ‘excuse’ to clear protests, carry out raids and push people from the streets21 (Oxford Analytica, 2020). COVID-19, coupled with the economic crisis, has stalled the progress made in Tripoli in reclaiming public spaces.22 Despite the government lockdown, people have been taking to the streets angered by the severe economic downturn and the slow response of the government to provide both immediate and long-term solutions. The country’s intersecting crises unravelled in the already neglected Tripoli, and manifested in attacks on banks and violent clashes between protestors and the Lebanese Army in al-Nour Square, which only months before had been the scene of peaceful demonstrations. “The downward spiralling of the security situation in Tripoli caused the perception by city inhabitants that Tripoli is left by the security forces to deal with such incidents ‘on its

20 Interview with Rony Jalkh, 7 July 2020 via Microsoft Teams.
21 Interview with Mona Harb, Professor of Urban Studies and Politics at the American University of Beirut (AUB), conducted by Ruth Simpson on 30 October 2020 via Microsoft Teams.
22 Interview with Samer Chinder, Maryam Nazzal and Wael Sinno 6 July 2020 in Beirut, Lebanon.
own.” For this reason, and the COVID-related lockdown, al-Nour Square became empty of protestors and normal life.

Pre-pandemic there were more opportunities for diverse interactions among different refugee groups and between the refugee and Lebanese marginalised communities in informal recreational spaces in Beirut suburbs. COVID-19 restrictions severely limited these opportunities for recreation and socialising, not simply due to the limits on public gathering, but because of increased fear by refugees and migrant workers of moving in public spaces during the pandemic. There have been incidents of verbal and physical harassment of refugees and other non-nationals, related to rising stigma related to the pandemic (Fouad et al., 2021), as well as curfews being applied in a discriminatory manner, further curbing use of public spaces (Human Rights Watch, 2020).

While COVID-19 measures are largely seen as curbing protests, there are some examples of such measures sparking protests. As restrictions were being lifted, some activists questioned why restaurants were opened before public parks and why private beach clubs opened before public beaches. This resulted in spontaneous protests with groups going to the sea, first in Tripoli and then elsewhere to swim in public beaches. Thus, COVID-19 restrictions have underscored the importance of public spaces serving the public good, rather than private gain.

Although in the short term the COVID-19 crisis has limited the mass movements to reclaim public spaces, it seems unable to stem the tide of shared awareness and belonging developed in the October movement. The deepening economic crisis is further constraining people’s ability to access private areas for socialising and entertainment and driving them to public spaces, such as public beaches and campsites. Elites have thus regained some (public) ground contested during and through the uprising through public health measures.

Shared spaces: urban public spaces as venues for peacebuilding

The October movement and COVID-19 underline the imperative to rethink public spaces and provide communities with open and inclusive places to interact and communicate freely. The public square should not function as the city’s gateway for its elite but should provide opportunities to engage in political, social and cultural debates, and allow people to reimagine and co-create public spaces in a participatory way.

In the context of concurrent economic, political and health crises, finding platforms that allow communities to get together and reactivate public spaces requires a considered approach, which entails addressing and analysing the specific fragility and safety factors in each context. As a starting point, it is crucial to acknowledge the restrictions that the COVID-19 pandemic has placed on using public spaces, and the “best way to approach public spaces now is to think small-scale, in a sense that community members gather and look for ways to make use of and renovate the available public spaces in their

23 Ibid.
24 Interview with Abir Saksouk-Sasso, 15 July 2020 via Microsoft Teams.
25 Interview with Mona Harb, 30 October 2020 via Microsoft Teams.
26 Interview with Abir Saksouk-Sasso, 15 July 2020 via Microsoft Teams.
27 Interview with Rony Jalkh, 7 July 2020 via Microsoft Teams.
neighbourhoods”. Such an approach entails in-depth level of working with communities to help them identify, understand and analyse their needs. Public spaces and the urban environment can be a prism through which to view and understand peacebuilding processes in the city space and how urban conditions can facilitate or hinder the construction and maintenance of peace (Björkdahl, 2013). In that sense, peacebuilding processes need to work with all constituents of cities’ social fabrics, and to better address, analyse and mitigate tensions and spatial practices related to the distinctive culture, religious sects and social class of communities in diverse cities such as Beirut and Tripoli.

Public spaces can provide unparalleled spaces for peacebuilding, renegotiating relationships and reconciliation. They provide fluid and informal spaces to engage diverse communities, including those traditionally marginalised. They can be used as spaces for inclusive dialogue, exchanging ideas, discussing concerns and reaching joint solutions. Where physical gathering presents a challenge in the COVID-19 era, using GPS and aerial mapping can help overcome the challenges of on-the-ground physical mapping and engagement during a pandemic. Here it is possible to draw from International Alert’s GPS mapping approach to urban peacebuilding (International Alert, 2017).

In Tripoli, International Alert worked with a local organisation to support young men and women from different neighbourhoods in mapping historical, cultural and touristic landmarks in their city. Youth were trained on using GPS technology for mapping around a hundred historical and religious landmarks, schools, pharmacies, restaurants, shops, etc., which were later added to Google Maps. The initiative helped youth, across conflict divides, to regain a sense of pride in and belonging to their city. This initiative is among several that work with public spaces as venues for peacebuilding. Although such initiatives are instrumental in fostering social interactions across divides, as they bring youth from different parts of Tripoli to work together, sustainable programmes are needed. Age, class, sectarian and political differences continue to act as flashpoints of division (Al-Masri, Abla and Hassan, 2020). Despite the display of national unity in al-Nour Square, spatial connections within the city are weak. Class differences are particularly stark in Tripoli and they affect motivation to join protests, the nature of participation and the type of direct actions preferred and carried out.

The current crisis and the increased citizen interest in public affairs bring opportunities for the movement to push for shifting the discussion from political infighting within patron–clientelist frameworks to reformist and inclusive processes. This presents an opportunity to support processes for facilitating collective decision-making or deliberative democracy, such as Citizens’ Assemblies at municipal level, including in urban centres such as Beirut and Tripoli (Al-Masri, Abla and Hassan, 2020). This includes bringing together a range of participants from diverse political, regional, socio-economic, gender and other backgrounds to discuss key issues, such as reimagining public spaces, and develop joint actions and visions. Municipalities are one of the key partners in this process, and the best approach to transfer knowledge to them is “learning-by-doing”.

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28 Ibid.
29 Interview with Abir Saksouk-Sasso, 15 July 2020 via Microsoft Teams.
30 Interview with Rony Jalkh, 7 July 2020 via Microsoft Teams.
Decentralisation offers an opportunity to engage municipalities, a main stakeholder in peacebuilding efforts related to public spaces. Such engagement is not without challenges, given the lack of municipal financial and technical resources for urban planning, and efforts should be balanced with bottom-up, organic approaches to reimagining public spaces. For example, renovation works of a community football playground in a Tripoli neighbourhood where the main users, including children and youth, and secondary users, including adult men (and to a lesser extent adult women due to social and cultural norms in such a context around women’s participation in public sports), did not participate in imagining and designing the space resulted in the exclusion of their needs, as the high-walled and gated space did not provide a sense of safety for them to freely make use of it. The cases of informal football fields and other social gathering places in Beirut and Tripoli (March Lebanon, 2020) and the reclaiming of public spaces in the October 2019 movement show that it is the informality or transgression that allows space for genuinely inclusive and open interaction between different communities. Therefore, efforts need to be both formal and informal, and link grassroots initiatives with national-scale efforts in planning to reclaim public urban spaces.

The post-October 2019 context presents an opportunity to build a community of practice on evolving dynamics and peacebuilding trends, including public spaces (Al-Masri, Abla and Hassan, 2020). Civil society organisations, and especially youth networks, represent key agents for advocacy and coalition-building across communities around reclaiming public spaces. Acknowledging that “different areas of expertise have a role in designing safe and inclusive public spaces including architects, urban planners, social scientists, experts on gender and child safety, municipal police, local CSOs, representatives of political parties, schools, educators, mosques and churches, dispensaries, etc.”, organisations are now adopting this integrated approach that brings them together and engages them throughout the design and implementation phases.

**Conclusion: Reconstructing public spaces as a public good**

Issues of public space have increasingly been at the heart of social movements and calls for reform, as seen most recently in the October movement, where protests reclaimed new spaces. These movements reimagined and transformed people’s relationship with public spaces, raised awareness on their rights of access to public spaces and reaffirmed their commitment to reclaim those rights. “Collectivities come together to embody an alternative political imaginary, one where being together is based on the shared aspirations of a life in dignity and mutual respect” (Fawaz and Serhan, 2020). In the context of clientelist networks, which are invested in encroachments on public spaces, and considering the broader context of Lebanon’s sectarian power-sharing system, the reality is that such reclamation is a lengthy process, fraught with challenges.

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31 Interview with Mona Harb, 30 October 2020 via Microsoft Teams.
32 Interview with Rony Jalkh, 7 July 2020 via Microsoft Teams.
33 Interview with Abir Saksouk-Sasso, 15 July 2020 via Microsoft Teams.
34 Interview with Jessica Chemali, 17 July 2020 via WhatsApp.
35 Interview with Rony Jalkh, 7 July 2020 via Microsoft Teams.
Many believe that it is too early to claim that public spaces are fully reclaimed; however, their use was certainly rediscovered by the people. The lack of vision, resources and capacities for urban planning has contributed to the prioritisation of public spaces by local authorities; coupled with the economic crisis, it has the potential to threaten the gains of the movement and the sustainability of such shared spaces against encroachment.

There is little doubt that Lebanon’s past conflicts have disrupted people’s connectedness to public spaces, and the political obstacles to reclaiming public spaces loom large. However, what the October movement has succeeded in doing is giving back to public spaces their true meaning and function of offering essential opportunities for diverse interaction across class, political, social, generational and gender divides. To build on these advances, public spaces need to be understood as a public good and as a crucial vector for inclusive engagement and peacebuilding. To both reframe and reclaim public spaces as a public good, capitalising on gains made in the October 2019 movement, which can lay the grounds for peacebuilding, it is critical to invest in maintaining safe, inclusive and openly accessible public spaces. This necessitates a shared vision for how these spaces can be used by people to cultivate a shared sense of belonging with the space through community-led social, cultural and economic activities. It is crucial that municipalities are actively engaged in planning and coordinating the use of such spaces. This requires resources, technical capacities for mapping and planning spaces over the long term, as well as political will.

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36 Interview with Samer Chinder, Maryam Nazzal and Wael Sinno, 6 July 2020 in Beirut, Lebanon.
37 Interview with Mona Harb, 30 October 2020 via Microsoft Teams.


Investigating Users’ Changing Needs in Relation to Non-designed or Unplanned Public Spaces in Cairo

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Abstract

In recent studies, public spaces are defined as living organisms that are subjected to continuous change. These changes affect the different uses of the urban space, its composition and design aspects, in order to cope with the users’ changing needs. Rather than that, users intervene in the space formation either formally, by including the community and stakeholders in the design process fully or partially; or informally, by small or big actions done by the space users in order for the space to satisfy their current needs. Several spaces in Cairo are dealt with as leftovers of the buildings design and construction process. These spaces have passed through several changes that affected and was affected by the Cairines (Cairo citizens) and their culture of dealing with public spaces to accommodate their changing needs. The deficiency in public spaces in Cairo urban spaces is reviewed. And the inability of the formal designed/planned spaces to respond to the spaces’ users with their changing needs is investigated throughout the research. In order to focus on a public space in Nasr city district in Cairo, sequential mapping to the area over different ages is carried on, examining the changes -formally and informally- in the space to cope with area users. That is accompanied by surveys and questionnaires that aim to determine the needs of the users in the space and whether they are met or not. The questionnaire also aims to measure the level of intervention and satisfaction of the users in this space, to explain how its users intervene in adapting to the existing formal design, and to find out how these interventions shape and affect directly and indirectly the dynamism of the space as a formal planned public space. The paper aims to review and find out theories and practices that provide solutions for dealing with non-designed open spaces development in terms of users changing needs and contributions. The results from the study show some development considerations that need to be respected in Cairo public spaces with more concern for people’s usage and interaction with the space.

Keywords: changing needs, dynamism of space, Cairo, public spaces, non-designed spaces, leftover spaces, placemaking

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Investigating Users’ Changing Needs

1. Public Realm and Public Spaces

The term public realm have been approached in many researches by many specialists, academic researchers and experts, who are directly or remotely concerned with the people or the citizens of the city - such as Hannah Arendt (1998) and Jürgen Habermas (1964) in political field, and Michael Brill (1989) and Jan Gehl (1987) in the field of urban design and planning - in order to serve a vital role in the research fields as politics, economics, sociology, planning or landscape and urban design (Goodsell, 2003). For ages authors in many different disciplines have employed the term quite differently such as Jan Gehl in his book “How to Study Public Life” (2013) and Allan Jacobs in his book “Great Streets” (1995) which in some ways may relate to each other to get a better understanding to it. There might be some contrary between how public realm can be identified or distinguished from the social realm and perspective; and how it can be conceived as a physical attribute such as city centre or town plaza from the urban design perspective. That lead experts suggest a more clarified definition to the term “public realm”. Researchers tend to examine and study the public realm based on their own specialization and field of study: geographers examine the spatial dimensions of the public realm by exploring the built and virtual environments as places for public life to play out, while political philosophers conceive it more abstractly as the rational space where the state and civil society are enacted, reproduced, and negotiated. Economists deal with the public economic realm as it includes the valuation of public goods and the management of public finances. And last but not least, sociologists address the social public realm as the location of people’s everyday interactions and contributions where identities and shared meanings are constructed. Zachary Neal in the Encyclopaedia of Urban Studies (2018) refers to public realm as all aspects of the social world that are not exclusively private (e.g., private property, private life). By which he divided the public realm into multiple overlapping dimensions that have each given rise to distinct theories and modes of investigation, often within the boundaries of specific academic disciplines. Lyn H. Loftland (1998) defined public realms as “not geographically or physically rooted pieces of space. They are social, not physical territories. Whether any actual physical space contains a realm at all and, if it does, whether that realm is private, or parochial, or is public is not the consequence of some immutable culturally or legally given designation. It is, rather, the consequence of the proportions and densities of relationship types present, and these proportions and densities are themselves fluid”. In urbanists’ point of view, public spaces’ definition can be more specific and inclusive. Many have defined public spaces from their point of view as Woolley (2003) tried to simplify the definition in the book Urban Open Spaces, addressing public spaces are arenas for different activities performed by different users in their daily lives. The Charter of Public Spaces provided a more generic but specified definition of public spaces as “Public spaces are all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive (Garau at al., 2013). Public spaces are a key element of individual and social well-being, the places of a community’s collective life, expressions of the diversity of their common, natural and cultural richness and a foundation of their identity. The community recognizes itself in its public places and pursues the improvement of their spatial quality. Recently, urbanists and socialists started to agree on dealing with public spaces in both perspectives combined together. Allowing better improvements and focusing on the community itself and their interaction with the physical spaces. They emphasis the
direct relation between cities improving their public spaces and the enhancement of community cohesion, quality of life and citizens civic identities (Garau, 2016). But the question emerged is whether public spaces now are good enough for the public in their daily uses or not, and how can the space and the community affect and be affected by each other. In a recent study for Project for Public Spaces (2015) produced a diagram (Figure 1) that shows the economic, social and environmental values of public spaces in recent times.

![Figure 1. Economic, social and environmental values of public spaces. Source: Project for Public Spaces.](image)

1.1 Non-Designed and Leftover Spaces
Dealing with open spaces, it can be noticed that there are some spaces that end up abandoned or empty of design elements that can’t fulfil the definition of public spaces. Leftover spaces can be found in different forms and as a result of different actions. For example, non-designed and leftover spaces can occur to exist next to a designed and planned development, underneath bridges, along high-ways or as backyards or vacant areas in a building complex. (Qamaruz-Zaman, et al., 2012)
Non-designed and leftover spaces have been defined in several terminologies as “spaces of uncertainty” (Cupers & Cupres, 2018) “urban voids that are considered unutilized, unnoticed or meaningless by a large segment of community” (Akkerman & Cornfeld, 2009/2010) or “no man’s land” (Groth & Corjin, 2005). This kind of spaces are mainly characterized by the lack of officially assigned or designed uses, abandoned, not developed and they act as the backside of the primary designed and planned uses of the public space. This kind of spaces can be considered either as negative misused spaces or potential public spaces for future interventions.
2. Public Spaces Change

Over time public spaces have been in continuous changes coping with political, economic and social factors. Those factors might affect directly and indirectly how and why public spaces are designed. Several approaches were used on spaces to be dealt with, that can be classified as shown in Figure 2 into three main approaches as follow (Woolley, 2003):

- Traditional approach.
- Modernism approach.
- Post modernism approach.

The traditional approach which emerged in the period from 1960s to 1970s was a response to the evolutionary demands of the society back then. It acted as a movement of renewal to public spaces which have been affected and ruined as result of wars (van der Werf, 2016). Trying to deal with emerging challenges as low urban quality, poor life conditions and the focus on developing the city and public spaces to fit with the vehicular uses only (city for vehicles) (Gehl, 2003). In her book *The Book and Life of Great American Cities*, Jacobs commented on how cities should consider pedestrians as well as vehicles. She claimed that "Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody." (Jacobs, 1961). This kind of development resulted in a polluted environment with low quality public spaces that barely meet the needs of the pedestrian use. Followed by that, appeared the modernists approach as discussed by Loukaitou-Sideris which took place during the period from 1970s to 1990s (Loukaitou-Sideris, 2006). Treating the public spaces, the modernism approach was concerned more with the aesthetic side of the space as Gehl argues that the involvement of architecture has contributed in the improvement of public spaces aesthetically to be more pleasing to public use yet can provide a wholistic solution to all the issues plaguing open spaces (Gehl, 1987). Flowingly the post modernism era emerged which continues to our recent times nowadays but have evolved throughout time. Post modernists started focusing on issues of “life in the city and the interplay between urban life and public space” (Gehl, 2010). In the last decade the focus of public open spaces has changed to highlight the importance...
of urban liveability and the important role of the public open space environmentally, socially and economically to embrace space sustainability and sustainable public spaces.

2.1 Development evolution
Dealing with public spaces have been developing over time. Getting affected by political directions, economic factors or social changes throughout history. According to Place Making approach on their release, as in Figure 3 the relation between the way of dealing with public spaces and how it affects the community (Projects for Public Spaces, 2007).

1. The project-driven approach is a type of top-down process that is led mainly by the government or the authority, it results in a space that follows a general protocol or system with no respect or fulfilment of the public local needs (Southworth 1989).

2. The discipline-led approach is the type which depends on a specific single vision in the design, for example urban designers or other professionals. Spaces started to look more attractive aesthetically but haven’t succeeded to be a good attractive space for public users (Barnett 1974).

3. The place-sensitive approach is the type of spaces which depends on space designers to gather community input and needs in a public space in order to develop it. Yet it is still led by architects and urban designers (Linovski and Loukaitou 2012).

4. The place-led approach relies in its basis on not just the input of community needs before the design process, but also their involvement and engagement in the design process and output of the public shared space. This approach helps improving a space that can cope with the changing needs of the public using their own space (Projects for Public Spaces, 1978).

Figure 3. Evolution development over time. Source: Project for Public Spaces.
3. Research Problem
It has been noticed in many places around the world how a good public space can attract the city residence for social interaction, physical activities and ecological benefits. But what about our local public spaces in Egypt or in the city of Cairo specifically as the heart and capital of Egypt, when we look at our public spaces are we able to define these spaces or get the functions of these spaces? are the users benefiting the social, physical and economical aspects of the spaces? If we compared the local public spaces to the well-known successful public spaces, we will find a gap between what the public spaces should act like and what they are actually like and this affects the residence quality of life and their sense of well-being (Singerman, Amar, 2009). Concerning public spaces in Cairo urban fabric can be noticed that they exist physically. Cairo public spaces might be left during the design phase as open spaces between the urban fabric, but do they achieve the purpose of their design, do they interfere in people’s lives positively and allow them to have the quality of life that Cairo residence deserve. The research will be studying the deficiency in public spaces in Cairo urban fabric and the inability of the formal designed/ planned spaces to respond to the space users changing needs. Throwing focus on how the users dealt with this deficiency over time and their interventions in non-designed and leftover spaces in Cairo in order to cope with the problems facing them in a public space.

4. Case Study: The international Garden Area in Nasr-City
Nasr city, one of the main districts in eastern Cairo that was excited based on Egyptian president Gamal Abd El-Nasser’s decision of building a new district in the desert part of Cairo back in 1959 (Abouelmagd, 2011). The master plan and urban design of the district designed by Dr. Sayed Koreim is based on a grid pattern that divides Nasr city into neighbourhoods. These neighbourhoods are designed adjacent to each other with central nuclei containing the activities and services of each zone with a bigger servicing and entertainment centre for each group of neighbourhoods (Reconstruction, 2019). The urban morphology of Nasr city has gone through several changes and transformations, which can be viewed when the actual urban state is compared to the proposed and first executed state (Selim, 2016). The paper focus on one of the urban areas in Nasr city district which is considered one of the biggest breather spaces in the whole urban area of the district, as it is considered the biggest garden and green area in this morphology, the international garden. The paper will focus on the strip of buildings and spaces overlooking the northern side of the international garden. Which contains some retail shops, cafes and restaurants with an outdoor public space used by several types of users such as area residence, youth and families seeking some entertainment or passers-by.

4.1 Methodology
In order to understand the deficiencies a space can go through, and to study the interventions and the changes that users add to the place to cope with their changing needs the case is mapped showing two main phases, the initial state that was dealt with as a leftover of the project design and the current situation of the urban formation of the space in order to observe the changes the space has gone through. To be able to understand and assess these changes and their effects, field observations are carried on
in different timings of the day and night to monitor the type of activities and the way of usage of the users to the space changes; in addition, online and field questionnaire was distributed on the space users aiming to understand and measure their satisfaction of the current situation of the space and the changes by questioning if the space meet their needs.

The mapping of the site depending on showcasing the pre-design and initial construction of the space in comparison to the current physical situation focusing on the main areas that have fallen under changes by the users that affected the hardscape, softscape and light furniture of the spaces. While the questionnaire was constructed to measure the users’ needs and if the space meets these needs or not based on the common main needs that should be provided in a space based on literature. The questionnaire is then accompanied by an overlay of the spatial observation of the users’ allocations in the space and its relation to the physical attributes and the activities taking places in the space.

4.2 Space Changes

By viewing the initial design of the space as shown in Figure 4, it can be observed that the area wasn’t designed putting in consideration the users’ needs in the landscape of the space as it was plain and treated as a leftover space of the built-up area of the residential buildings.

![Figure 4 - The initial map of the public space in front of the International garden of Nasr city.](source)
Source: Authors

![Figure 5. The current map of the existing situation - 2019. Source: Authors.](source)
Throughout time users have made some interventions in the landscape and buildings in order to accommodate their changing needs that haven’t been fulfilled in the initial design. When leaving a space non-designed and not fulfilling its purpose as a public space, users of the area don’t have the power or resources to develop the space in order to meet their own needs. Therefore, shop owners (in this case) whom have the power and motivation to make change end up taking the action of intervention to be a win-win situation to both space users and the shop owners themselves to build up their business.

Figure 5 maps the general interventions in the space which are in different typologies and can be for different purposes that serves several types of the space users.

4.2.1 Interventions Typologies
On decades time scale for the area, it can be noticed that many interventions took place by the users of the space, mostly are for commercial purposes or to serve and attract the target users of the space. These interventions can be classified into three main typologies shown in Figure 6 that are viewed in the space which are:

1. Encroachment.
2. Place appropriation.
3. Movable modifications.

Encroachment
These are empty spaces in the initial designs at which cafes and restaurants owners decided to add enclosed light structure to increase their area and territory in order to attract and accommodate more clients to their existing area which can be seen in the existing map in the dark blue coloured zones. The encroachments of the restaurants and shops can be sometimes legal or illegal.

Place appropriation
These used to be areas between buildings which weren’t used well or even used at all as they didn’t have main landscape elements as seating areas, shaded areas or even green areas. The residents and shop owners hired consultants to construct these areas in order to accommodate the users’ needs and attract more people to the whole area. Those zones are shown in the existing map and can be recognized as four main zones. Two of them are in the frontal area of the buildings serving more commercial purposes while two other zones in the back area of the buildings serving the buildings residents and users more.

Movable modifications
These are just street furniture as seating, tables and umbrellas that are added and removed daily by the cafes and restaurants to accommodate more users in the peak hours of the area getting benefit from mostly all the pedestrian areas of the space and on top of the underground parking ventilation areas. Leading sometimes to crowding and blocking the accessibility in some areas in the space and can be shown and noticed in the existing maps compared to the old situation.
4.3 Users Needs in Public Spaces

“Why do people go to public spaces?”, a question that pops up when studying the social community and their relation to urban forms. Many of the reasons of people spending time in public spaces is their need as human beings to interact and escape city crowd and noise somewhere (Milgram, 1970). That’s why this leads them to find spaces where they can practice whichever activities that help meet their needs.

That leads us to find out what kind of needs that users seek in spaces in order to attract them and fulfil their urge to spend time in public spaces. According to the book “Needs in Public Spaces” (Carr, et al., 1992) it is summed up that there are five main reasons that account for people needs in a public space which are comfort, relaxation, passive engagement, active engagement and discovery. In order to avoid misuse or quitting of people to spaces it is so important to understand their needs and how can they be met.

"Projects for public spaces" in their issue “Placemaking” (Projects for Public Spaces, 2007) researchers tried to provide a new modern module for understanding people needs in public spaces by summing users’ needs into four main key attributes that should be achieved in order to satisfy the public realm which are:

1. **Access and linkage**: spaces are accessible and well connected to other important places in the area.
2. **Comfort and image**: spaces are comfortable, safe and project a good image.
3. **Uses and activities**: spaces attract people to participate in activities in the spaces.
4. **Sociability**: spaces are social environments in which people want to meet up again and again.

These four attributes were interpreted and expressed in a form of question that can measure the level of achievement of each of them in a space in order to measure the people’s satisfaction of the selected space after the changes and interventions it has gone and is going through.
4.4 Focus Area
This paper is focused on a specific space in the whole area that shows one of the biggest changes over time. The selected space shows several types of interventions in one space that can be significantly noticed by just observing the space as it is seen in the site pictures in Figure 7.

Figure 7. Site pictures showing the current landscape design of the focus area. Source: Authors.

The following Figure 8 shows the mapping of the area at its first stages and the result of the changes applied on the landscape design. These changes happen to be resulted by shop owners of this area who collaborated and hired a landscape company to redesign this area based on their needs of an active attracting public space that contains a proper seating area, green areas with some plantation and a different tiling than the
surroundings in order to attract more customers to their provided products. Other area on the space is the ventilation area of the underground parking on which restaurants used its super platform as a levelling that accommodate light street furniture of tables and chairs and providing stairs to make it accessible to the space users.

4.4 Spatial Analysis
The new current formation of the space is designed to provide a better use from the shop owners and space users perspective to cope with their changing needs. In order to understand the space well a street section is drawn in Figure 9 to allocate the kind of activities and interventions in the space and how do the people deal with them.

Figure 9- Visual and functional analysis of the focus area. Source: Authors.
The red section is the area on which light street furniture as seating, tables and umbrellas are spread before the beginning of the arrival of cafes customers at day time and collected every night after the day is over, the light blue sectors represent the pedestrian paths that are considered in the design to provide accessibility to the shops and the back area of the buildings, the orange sectors represents the hardscape area designed to accommodate fixed seating areas, green areas with plantations and different tiling in order to specialize this zone for the users, While the green sectors identify the existing main activity in the space which is the food and beverage services provided by the shops highlighted in the section.

To get more understanding of the space field observations of the users type as for gender, age and number and their allocation in the space. The field observations are used to get insights of how the users deal with the space than getting frequencies of the space usage. The focus area was visited on several days over the day and night to get more comprehensive understanding of the kind of activities that takes place in the area and what attracts more people to the area. Several maps of users of different days took place. The observation of the field was done on specific timings of the day with a margin of 3 hours between each map in order to get better image of how the users deal with the place, what attracts them and in what times are some areas of the space crowded or not.

A random day of the week is picked and mapped for the periods 1:00-1:30 PM, 4:00-4:30 PM, 7:00-7:30 PM and 10:00-10:30 PM focusing on the numbers and locations of male and female users of the space with only spotting the users standing or sitting in the space, excluding the passers-by in the area. Then an overlaying of the 4 maps is done and shown in Figure 10 showing the most attracting spots for the males as the blue spots and the females as the red ones.

*Figure 10. A map showing the overlay of users’ locations along the whole day. Source: Authors*
5.0 Findings
In this section the research findings are divided into two sections. The first section focuses on the observations noticed, analysed and categorized in order to have better understanding of how users deal with the space to deal with its problems and deficiencies in order to meet their needs. The second part is based on the results of the questionnaire measuring the current users’ feedback and comments on what the space have achieved ad what my still be missing from the current situation.

5.1 Intervention Purposes
Based on the previous analysis provided in the previous section that is structured on observing and mapping of the space with its modification compared to its original non-designed form, it is concluded that there are different types of motivation leading the interventions applied upon the space by the users for different purposes which can be summed up into three main purposes which are; functional purpose, aesthetic purpose and territorial purpose.

5.1.1 Functional purpose
One of the main and straight forward interventions done by the users as a direct response to their need to an accessible place is translated into direct pedestrian paths that connect the users from the main pedestrian sidewalks to the buildings’ entrances or by the shop owners to the areas around the shops and restaurants which is represented in Figure 11. Intervention purposes in the focus area. Source: Authors. In the blue coloured directional areas. Some of the paths were existing already in the initial state but due to the lack of maintenance and the deterioration of the paving materials, the new interventions applied new defined paths with different paving materials to ensure on the main functional paths in the space leading from one point to another.

5.1.2 Aesthetic purpose
The aesthetic purpose is a kind of motivation that exists and generate due to the need for users to have a good-looking attractive place that can provide a good image for the space. It was applied in the space by providing natural plantation that improve the whole landscape design of the space and enrich the hardscape and softscape design which represented in Figure 11 as the orange zone. Also, the design in this space is based on a geometric shaped design that can be viewed either by the human scale users on the ground level or by the approach of the terraces overlooking the space which makes it significantly different and unique than the whole surroundings.

5.1.3 Territorial purpose
Several activities and interventions in spaces can be considered done for territorial purposes as these actions are directly and indirectly a way for the users to spread their territory and sense of controlling of the space which is represented in Figure 11 as the light red colour and also the orange zone can fall under the umbrella of territorial motivation. In this space this kind of action is noticed in the case when restaurants and cafes overlooking the space try to expand their territory by adding small fences, using temporary furniture like light chairs or bean bags, or land covers or tiles in order to be able accommodate more customers with the intention of increasing their revenue.
4.2 Questionnaire Results
This part of the research aimed to understand how the changes in the physical attributes affects the users and their perception and way of dealing with the focused areas in the space. The questionnaire was distributed in a physical and online form to the space users and residence with a total of 52 responds that are divided into 56% of male users and 44% of females. The respondents age range in category from 19 to 45 years old however most of the respondents are between 31 and 45 years old. In order to have more understanding of the type of users in the space the users were asked about the kind of activities they visit the space for which turned out to be that 63% visit the space for food and beverage activities as restaurant, cafes and fast food shops while 23% are into walking and jogging through the space, 10% seeks relaxation in the space while the rest visit for other activities, which explains that people mainly are attracted to the space for the purpose of eating and drinking in an open space.

4.2.1 Analysing the Needs of The Community
The second sector of the questionnaire tried to measure how much does the space meet their needs based on the four main key attributes of placemaking offered by PPS. The following Table 1 shows the type of attribute to test and how it was translated into a question that reflects how much this attribute is achieved in the space to accommodate the needs of the users in the current setting of the landscape.

The last sector of the questionnaire targeted understanding the awareness of the users with the changes happened in the space and how they feel towards these changes.
Table 1. Questionnaire questions and results reflecting placemaking attributes

<table>
<thead>
<tr>
<th>Place making Attributes</th>
<th>Question</th>
<th>Answers summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access and Linkage</strong></td>
<td>How do you find your movement throughout the space?</td>
<td><img src="image" alt="Graph" /></td>
</tr>
<tr>
<td><strong>Comfort and Image</strong></td>
<td>On a scale from 1 to 5, How safe do you feel in the space?</td>
<td><img src="image" alt="Graph" /></td>
</tr>
<tr>
<td></td>
<td>On a scale from 1 to 5, How comfortable is the place to you [seats availability, movement, the image of the space, etc.]:</td>
<td><img src="image" alt="Graph" /></td>
</tr>
<tr>
<td><strong>Uses and Activities</strong></td>
<td>What kind of activities do you visit the space for?</td>
<td><img src="image" alt="Graph" /></td>
</tr>
<tr>
<td><strong>Sociability</strong></td>
<td>Who do you visit the space with?</td>
<td><img src="image" alt="Graph" /></td>
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The results showed that 63% of the people who have noticed the changes in the space think that these changes helped to improve the space. Last but not least, an open question was provided for the users in order to express from their perspective what can be done in the space in order to increase their satisfaction of the space environment; most of the comments requested a better and cleaner seating areas, more lighting spots at night as some areas might seem unsafe by night, more shaded areas by the day either by plantation of shading devices, and children friendly areas within the space. One of the comments that was added by the area residents was “Having my apartment in this street my whole life made me realize that being a little more vibrant and crowded is much better from safety point of view than when it was just an empty space. Lack of proper seating and relaxing areas is one problem. The main activity of the entire street is food, there isn’t really much else to do. And this space is mostly used starting evening, and night-time, there is nothing much to do in the morning, there isn’t even any place which serves breakfast, they’re all mostly closed in the morning so the space is kind of wasted a little without suitable shades and seats for morning time.”

Figure 12. Activities map of the focus area. Source: Authors.

4.3 Activities mapping
Following the users’ concentration spots and the questionnaire results, a relation between them is established to show what kind of activities take place most in the focus area and their connection and effect on the users’ movement and assembly in the space Figure 12 shows the main activities in the area and their circle of effect on attracting the users, where the yellow lines show the paths that carry the most flow of moving along and through the space, the orange zones are the ones where users use for food and
eating activity, the light blue zones are the areas where users use for relaxation and socializing because of the seating within the landscape and between the greenery and the trees, while the green zone represents the area where couriers of the surrounding restaurants rest and park their motorcycles so it is mainly a waiting area for them. The unmarked zones are the most vacant areas that are mostly abandoned by people in the area.

It can be noticed that the space was influenced directly and indirectly by the changes, turning from a vacant space to a public space that can accommodate users’ needs and activities. The people are benefitting from the activities offered by the place with the landscape facilities that helps providing their needs of comfort, safety and entertainment in the space.

5. Discussion

In order for the paper to understand the deficiency in the selected space and how did the users tried to cope and overcome the lack of main needs in the space, physical and motivational analysis are conducted. The observed interventions are either for functional, aesthetic or territorial purposes have impacted how the users feel and what they perceive in the space which is devised and explained in the questionnaire results and the spatial analysis. Which shows that there is a direct relation between the types of interventions mentioned in the space and the users’ satisfaction of their current and changing needs. It can be deducted that the more the space was developed and considered the needs in the space such as providing functional direct paths, proper seating areas and more attractive landscape design; the more users feel easy to move through the space, spend more time in the space and feel safer as the existence of people attracts more people to public spaces. The space has gone through changes that turned the leftover open space of the initial design of the area into a public space that is resembled in seating areas and small gardens publicly accessible to the neighbourhood users of all kinds, genders and ages. Despite these changes the space has gone through it still doesn’t meet all the users’ needs in a space and the users still feel that the space can offer more to increase the quality and the state of the place as a vital public space.

6. Conclusion and Considerations

The paper has shown that there have been some changes in the landscape design of the selected space. These changes were carried on by some of the community (shop owners and neighbourhood residents) using and benefiting from the space in order to meet some demands and increase their personal benefits in the space. Which in a direct and indirect way affected all the users of the space either socially, economically or physically, and attracted more people to the space that resulted in contributing to the general satisfaction of the users.

Community involvement in the design process is one of the most common approaches used nowadays in public spaces design as the spaces are designed by and for the people. The research shows that the people’s needs are dynamic and are always subjected to change that’s why the design process should be a continuous process that involves people feedback and sometimes the construction phase as well. Placemaking is considered one of the most adapted place-led approaches that put the people first in
the design, construction and management process of a space. In the chosen case study, the space was dealt with as a leftover that was not considered in the design phase of the area, but that was a good opportunity for the users in the area to have a role in the design of the space as a reaction to their changing demands and needs along the time. The paper used the four main principals of placemaking to study the space and measure the effect of the users' interventions in the space resulting from their needs. The results still show some deficiencies in the space that needs to be considered within the area yet, it shows a story of success even slightly to cope with the users demands for a proper public space from their own viewpoint.

The study throw attention on the importance of putting people first when it comes to public spaces design as people are the main users and their existence and functionality is what makes a public space liveable and acting as a place. As a conclusion from the paper to be considered in future applications in Cairo public spaces it is crucial give attention to the non-designed and leftover spaces that can be spotted a lot in the city and to notice the dynamic change of users’ needs and not only focus on the designers’ perspectives but also the users’ perception of a space and their aims and right for the space to act as their live breather in the dense, crowded and polluted urban environment they deal with in Cairo. Which would result in creating public spaces that are capable of achieving their main purpose of improving the Cairines quality of life through their daily experiences in open spaces.

References
The Redemptive Potential of the Street. A Multi-angular Analysis of Dubai’s Pedestrian Infrastructure

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Abstract
Much has been written on the fast-paced development of Dubai as a city and the favouring of car-oriented streets in the approach to road building. This paper offers a reading of the city using forward-driven technological approaches in urban and transport planning to derive patterns and insights into areas of critical concern for intervention. The approach stems from the idea of incremental retrofitting as opposed to toppling over the current infrastructure. It is conceived as a way to significantly enhance the walkability and viability of Dubai’s streets for its residents using minimal resources, while drastically enhancing their ability to utilize public space. The article revolves around a collection of mobility studies focused on the conditions of the street. In full, the extensive research traces the functional structure of 36 streets within the city, offering various insights into their potential to deliver better walkable environments. Mobility studies included in this report include field surveys and progressive applied simulation methods. In full, they offer taxonomic categorizations of Dubai’s streets as well as possible concerted and planned retrofitting strategies to encourage safe and comfortable walking experiences. This paper focuses on how the interplay of various interdependent components of urban infrastructure creates the conditions for Dubai’s street space to respond to walkability needs. Building on international practice and the latest disciplinary tools, this paper delves into the physical characteristics of Dubai’s streets and interrogates some of the critical areas whereby minimal intervention is perceived to have a huge impact on spatiotemporal urban quality. In effect, the study highlights avenues for activating Dubai’s most overlooked latent public spaces: its streets.

Keywords: walkability, walkability metrics, digital mapping tools, retrofitting strategies, Covid-19

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Introduction
Dubbed as the fastest growing city on Earth in academic literature and the media alike, Dubai has received much attention over the past few decades for its unprecedented expansion rate (figure 1). Fuelled by the desire to create a global image and supported by a booming economy and a strategic location on the Persian Gulf, the city experienced a blowout in terms of land coverage, expanding by 17 times its area between 1975 and 2015 (Elessawy 2017). However, as many researchers have duly noted, this rapid expansion was disproportionately focused on built-up development in comparison to public space design (Elsheshtawy 2008; Mushtaha et al. 2018). As originally coined by Yasser Elsheshtawy, Dubai the ‘urban spectacle’ was partly conceived as a theatricalized space with the main focus being its impressive star- chitecture (Elsheshtawy 2010; cited in Montagne 2012). As explained by Mushtaha and others, Dubai’s articulation of public spaces was lost in the shadows of its skyscrapers and mega infrastructure; whatever little space exists has likely been appropriated by residents to fit their functional and recreational needs (Mushtaha et al. 2018).

Figure 1. Dubai's urban growth: a time-lapse 1984-2016 – property of Systematica srl

Today, master-planned communities and private developments by and large offer the most thoughtful open-air ‘public spaces’ to be enjoyed by their designated communities. These spaces, however, come at a financial cost to users and are subject to private laws of the estate developer (Chidiac 2020). Dubai is often envisioned as an archipelago of master-planned developments where recent focus on ‘public’ spaces is given to those spaces designed therein, with little attention given to publicly provided open space to be enjoyed by citizens at large. In a 2019 interview for Systematica, OMA director, partner...
and MENA regional project manager Iyad Alsaka stated that “hasty development that took place in late 90’s and early 2000, mainly led by semi government developers, and in complete absence of the city as a regulatory body, led to absence of public space and disconnection between ‘islands’ of the city.” (Alsaka 2019). This paper aims to direct the focus from the ‘islands’ of the city to the vast leftover space designed to connect these islands and the city in-between. According to the Dubai government, as of 2019 Dubai has close to 18,000 kilometres of road length across the city, up from 10,800 kilometres in 2009 – increasing by two thirds, or 66%, in 10 years (Dubai Statistics Center 2009, 2019). Many of these roads and streets, however, are not adequately equipped to support safe and comfortable pedestrian movement. In other words, they suffer from low walkability. Put simply, walkability is a measure of how friendly a certain area is to walking. It falls under the broader paradigm of sustainable urban development maintaining evidence of its various health, environmental and economic benefits to a city (Speck 2013). Like many global cities, the way Dubai’s mobility infrastructure is designed is centred around the movement of the car. Unsurprisingly, this planning approach has hurt the city in the long run as the infrastructure struggles to encompass its three-million-strong population. As a result, getting around the city is currently facilitated through six-lane highways, flyover junctions, overhead transit rail and a ground tram line that often act as an urban divider and contribute to a negative physical environment for those keen to travel on foot. In many countries to date, the only measure used to indicate an area’s walkability is crash data. However, various progressive measures of walkability today extend beyond issues of pedestrian safety to include indices for comfort and enjoyment, underscoring the complexity of experiential factors in determining whether a certain street segment offers an inviting walkable environment for pedestrians. Some of these measures will be discussed herein and applied to Dubai to analyse its street infrastructure. It is important to also highlight the fact that walkability reinforces other space-efficient modes of travel such as cycling and micro-mobility -which tend to require the same physical conditions as walking- and public transport, since walking is essentially a part of any public transport or multi-modal trip.

Methodology
The studies presented in this paper were selected from a broad body of research examining the characteristics of Dubai’s street networks, which was carried out by Systematica over the course of two years. The original body of work traces the organizational structure of streets across Dubai (figure 2) via two main strands of quantitative methods: (i) applied mapping methods using progressive and robust mobility analytical tools and (ii) site survey and direct observation, which constructively took place in the summer of 2017 (June-August). GIS programs used in the analytical process relied on models such as the Pedestrian Level of Service (PLOS), data from the patented system, Walk Score, network theories such as Space Syntax and CUBE software by CitiLabs. This combination of mapping and direct observation provided a framework for reading and understanding the city with the ultimate purpose of strategizing and prioritizing retrofitting actions. The research area for site survey and direct observation was focused on Dubai’s high-density city core, spanning from the Dubai Marina to Dubai Creek along the coast, and
extending about 6km inward towards the large Al-Khail road infrastructure. An inventory of 36 streets was drawn up for detailed survey and documentation, serving as the basis of the observational studies. In contrast, the study area for applied methods varied: it followed a global approach for Walk Score and Space Syntax analyses (extended across the city of Dubai) and followed a local approach for PLOS and pedestrian simulations using CUBE, focusing on the Palm Jumeirah area and Dubai Business Bay, respectively.

Retrofitting is an approach in urban planning that takes as its basis the current condition of a city or area offering strategic as opposed to wholesale interventions in order to provide quick, costless (or cost-effective) and effective solutions to persistent or emerging needs. These interventions may be permanent or subject to change depending on the resources used to achieve them. Yet, retrofitting is fundamentally conceived as a constitutive effort integrated in a wider strategy for urban development (Hodson and Marvin 2016). This paper explores potential pathways for retrofitting via three mutually reinforcing retrofitting strategies to upgrade the walkability experience of Dubai’s street infrastructure with particular attention to the impeding conditions of the current COVID-19 pandemic situation.

In essence, the research aims to highlight the redemptive potential of the street as a means to enhance Dubai’s public space offering and walkability prospects. No clearer is this redemptive potential than in our current global moment, whereby new emerging
health regulations necessitate that we reorganize our streets to enable safe and efficient mobility with the least negative impact on the environment. This is particularly evident in the growing global plea to liberate more street space for pedestrians and cyclists in order to allow for sufficient social distancing while ensuring the minimum required space occupied per capita (Comune di Milano & AMAT 2020; NYC Department of Transportation 2020; Koronavírus Budapest 2020; World Health Organization 2020; Honey-Rosés et al. 2020). It is for this reason that we focus explicitly on these principles as avenues for reshaping Dubai’s infrastructure to (a) restore city life in the near future without compromising public health conditions, and (b) redirect the tracks of the city’s mobility trends towards a more resilient structure on the long run.

‘Reading’ the city
Contemporary digital mapping tools have come to the aid of urban researchers and planners in the time of COVID-19 by allowing them to quantify and visualize the implications of the urban structure on the pandemic and vice versa. During a time when movement and public mixing have quickly become antidotes to public health, and mobility structures have been overturned by unprecedented stipulations, the need for integrated and coordinated efforts to quickly reorganize the way people move in the city has been amplified. In the first order, mapping tools are effective instruments for defining the magnitude of a given problem. In Milan for example, a Systematica-launched effort to map the entire city’s pedestrian infrastructure –taking sidewalk width as the variable factor– provided a basic overview of where it was possible to support social distancing practices across the city (see Milan Sidewalks Map). Assumptions based on local regulations for safe interpersonal distance provided the basis for measurement. By categorizing the city’s sidewalks on a progressive scale from ‘extremely unsafe’ to ‘ideal’, the study revealed that about 45% of the city’s pedestrian infrastructure was unfit for adequate social distancing (Systematica 2020). In the following section, we turn our attention to several walkability indices that are useful in reading the city and streets of Dubai.

A prominent method of assessing street safety and comfort to pedestrians is the Pedestrian Level of Service (PLOS) metric. Starting from a detailed GIS model, the PLOS method is a useful way to detect pedestrian-friendly street segments at city scale. The result of this application is a color-coded map of the city’s streets ranked from PLOS A (most pedestrian-oriented segments) to PLOS F (the most car-oriented), as seen in the mapping of Dubai’s Palm Jumeirah area (figure 3).

While the PLOS metric can tell us a lot about the level of comfort of available pedestrian space, other measures are used to calculate how much of an area’s services can actually be accessed on foot by its own residents. This concept has been strongly iterated in recent international city plans and proposals under the now-famous slogan of the ‘15-minute city’ (Paris En Commun 2020; Comune di Milano 2020; City of Portland et al. 2012; Victoria State Government 2020). The 15-minute city or ‘complete neighbourhoods’ concept stems from chrono-centric views of the city that promote an urban lifestyle change by reintroducing the choice of proximity (Moreno 2020). This concept has become particularly popularized in the wake of the ongoing pandemic as a successful model for cities to follow if they hope to alleviate car dependency and compensate limited public transport occupancy rates under social distancing norms.
Figure 3. PLOS mapping and component analysis of the Palm Jumeirah area – property of Systematica srl
One of the many metrics developed to measure neighbourhood access to services on foot is Walk Score®. Based on pedestrian catchment areas and sophisticated linear distance models, Walk Score conceptualizes the idea that distance from amenities strongly influences travel modal choice. Scored on a scale of 1-100, the metric ranks areas on the basis of their capacity to host services reached on foot: 0-20 is a low score that indicates areas where most trips require a car, whereas ‘Walker’s Paradise’ is the term given to the highest scores between 80-100 where residents of an area can expect to make most of their essential trips on foot. In Dubai, an example of Walker’s Paradise is The Walk, or Al Mamsha Street. The famous pedestrian street seamlessly connects a large number of retail and hospitality venues while providing ample, thoughtfully considered space for pedestrians to roam (figure 4). Not far from there, King Salman Bin Abdelaziz Street represents a ‘Somewhat Walkable’ Street (score range of 50-69). In spite of its strong connection to services and facilities, the tram line bisecting the road creates a physical barrier for pedestrians with limited crossing points, which significantly increases travel time and hinders walkability. The Financial Center Road, on the other end, is a clear example of a Car-dependent street (0-20). With its high congestion levels and a complete lack of an active frontage to attract pedestrians, the street is hardly ever used for walking or recreational use. Apart from workers resting in the shade of the large elevated road structure across from The Dubai Mall, pedestrian activity is rare. These examples elucidate the idea that the physical environment of a street is not enough to render it walkable; land use structure and high connectivity levels are equally important factors.

Network theories are another branch of metrics, developed to understand how locations of services can be optimized for pedestrian accessibility. Space Syntax, a tool developed in the 1970's by Bill Hillier and other researchers at UCL, which has since been optimized by various generations of researchers, is one such renowned model. Space Syntax essentially visualizes the city as a legible system of nodes and relations. Its innovation...
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particularly stems from its elaborate and sophisticated approach to conceiving route choice decisions by pedestrians. It goes beyond traditional, rational assumptions of travel choice as a mere equation of time and distance and considers the cost of perceptive qualities such as ‘angular deviation’, whereby the relative cost of turning is taken into the equation as well. By determining the most convenient paths for pedestrian movement, the model can be calibrated to detect the most suitable locations for different services using ‘angular choice’; a method that highlights street segments that are inherently important parts of different types of journeys within a specified area (figure 5). A choice map set at 250m highlights ideal street segments for neighbourhood-scale services, accessible on foot within a short walk from home. Small local businesses requiring high pedestrian footfall could benefit greatly from locating along these paths. The choice map of 750m –the distance roughly corresponding to the 20-minute time limit most people are willing to walk to meet daily needs— shows the most convenient routes for longer walking trips (Gunn et al. 2017). At 2500m, we see the routes most suitable for cycling trips, while at ‘n’ meters (produced by setting the limit of angular choice to the maximum), we can distinguish the path segments that are most convenient for long-distance car-based trips. Pedestrian simulations have widely been restricted to emergency situation modelling. They are used to imagine evacuation scenarios of public transit stations, stadiums or packed entertainment venues, but can also be extended to determine safe walking routes in public space— particularly in light of the current pandemic situation. Pedestrian modelling is therefore a valuable tool to understand how people move, locate potential choke points and plan for them accordingly. In an exercise using CUBE, a software developed by Citilabs, it was possible to model pedestrian flows at Business Bay in Dubai using the same tool that was once used to predict the movement of cars and public transport, reprogrammed to predict pedestrian flows (figure 6). The system overlays a zoning model with pedestrian desire lines to predict primary axes of movement. If programmed to accommodate social distancing requirements, this tool can prove highly useful in organizing public space navigation during the pandemic crisis such as to allow for safe and efficient pedestrian flow within public space and at key access points.

‘Understanding’ the city

In this section, we turn to some insights from direct observation and site survey that resonate with the aims of this research. As previously noted, the implication of how much sidewalk space is available for users is essential to understand whether pedestrian movement could inflict harm on pedestrians in the form of contagion risk to airborne diseases such as COVID-19. Though not a full-fledged street-by-street survey, the limited 36-street study scans a variety of street typologies across Dubai: from local access roads to several-lane collector roads, and from highly pedestrianized to highly car-oriented streets. The selection of the surveyed streets was specifically designed to reflect the diversity of Dubai’s urban core between old and new, active and inactive. In the following section, we look particularly at how allocation of street space to different functions (and particularly to pedestrian movement) can impact usability and walkability of that street. Next, we investigate the role of junction spacing and pedestrian crossings in facilitating walking and reducing walking time/distance. Both elements have great implications on the city’s potential to provide a more pedestrian-fitting landscape during the pandemic and beyond.
Figure 5. Space Syntax integration and angular choice models – property of Systematica srl
Across Dubai, numerous streets are handed over to vehicles with only the minimum space allotted for other ongoing street activities. When it comes to large boulevards or several-lane highways, this discrepancy is emphasized, making whatever leftover pedestrian space seem contracted in comparison. After surveying 36 streets across Dubai with contrasting profiles (figure 7), the effects of the distribution of street space became clear: the analysis revealed that the way a street is used is strongly related to how street space is distributed among its different users.
Upon deeper speculation, it also became clear that the amount of space allotted to vehicles (or the ratio between vehicular and pedestrian space) is just as important. Regardless of the actual width of sidewalks, wide vehicular corridors are direct contributors to noise and air pollution, which work to diminish the attractiveness of walking and consequently footfall for at-grade commercial spaces. To take an example, while more than 30 meters are dedicated to pedestrians on famous pedestrianized streets such as the Boulevard and City Walk, large streets such as Al Wasl Road, Al
Barsha Heights and 308th Road – all major arteries of over 40 meters of width – have very small shares of sidewalk space with respect to road space, and thus very low pedestrian activity. In other examples such as Al Satwa Road, pedestrian activity prevails despite limited infrastructure due to several factors, amongst which are the high density and a higher availability of public transport services than most areas. A reading of the streets that considers the relative proportion between pedestrian and vehicular space highlights the importance of allotted street shares over actual sectional widths. Following this classification (figure 8), it becomes easy to identify the general orientation of streets with respect to walkability by categorically assimilating them based on their interdependent space provisions.

![Figure 8. Allocation of Space of Dubai streets by relative proportion (percentage) – property of Systematica srl](image-url)

The rankings run from A: the most pedestrianized streets; to F: the most car-oriented. Streets falling into the highest Category, A of totally pedestrianized spaces include the Textile Souq and the Waterfront Promenade in Marina. These streets present pedestrians with an opportunity to roam freely without concern over contact with vehicles. The area of Bur Dubai where vehicular access is limited to delivery drop offs is another such case. With up to 60-70% of space dedicated to pedestrians, as well as designated supporting features reflected in choice of material and a step-free environment, Category B streets are also designed with walkers in mind. Examples include The Walk, The Boulevard or the main street cutting through Citywalk. The third category, C, is where we find a balance between pedestrian and vehicular space (about 50-50). Service-oriented streets (D) are where more than 50% of space is dedicated to vehicles and which do not effectively encourage pedestrian movement (examples are Al Barsha and Al Wasi Road). Busy Streets (E) are where traffic flows are generally high with vehicles occupying up to 70% of space. These roads are not particularly inviting to pedestrians and tend to lack ground floor land use, such as in the case of the Jumeirah Beach Road. Not all street groups should aim for higher pedestrianization. Some of the roads in Group F (vehicle-oriented streets) – with more than 70% of space dedicated to vehicles –
are specifically designed to facilitate fast and efficient vehicle flows and would thus be compromised should their vehicular lanes be restricted or given over to pedestrians. A scattered plot diagram (figure 9) comparing pedestrian space to the full street section identifies cases based on their perceived need for intervention, as shown in the legend.

The UAE is one of the most stringent countries worldwide when it comes to social distancing standards. At two meters of required interpersonal distance in outdoor spaces, the value is double the recommendation of the World Health Organization and other global cities (UAE Government 2020; Matthews 2020). With that mind, and based on the model conceived for the Milan case study, we could infer that at least 3.4 meters of sidewalk width are required for acceptable pedestrian movement on Dubai’s streets. Some main corridors whose sidewalks do not adhere to this minimum width are the Financial Centre Road, Sheikh Zayed Road, The Palm and 308th Road.

While sidewalk space analysis is useful in determining how safely pedestrians can travel with adequate spacing and how conducive the environment is to walker’s comfort, junction spacing and pedestrian crossing analyses can indicate how efficiently they can travel. Low junction spacing and a high frequency of pedestrian crossings work to permeate the urban grid, encourage through movement on roads that are not otherwise designed for comfortable walking and provide more alternative routes for walkers (thereby reducing overall contact and enhancing route efficiency). Following, we examine two street examples to showcase the importance of proper and adequate planning for pedestrian crossings.
The first case is the King Salman Bin Abdulaziz Al Saud Street. As mentioned in the previous section, this street is ranked as ‘somewhat walkable’ due to the physical barriers limiting crossing on both sides of the tram line. Introduced in 2014, the Dubai
Tram’s 10-kilometer network of eleven stations is a positive addition to Dubai’s transport infrastructure. It is also commended for its progressive approach to power supply via ground connection. The third rail technical solution, which is only applied in a few tram line systems around the world, drastically improves urban quality by eliminating overhead cables. However, despite technical progress, the design falls short in delivering a seamless terrain for foot traffic. With both sides of the line fenced off, crossing is restricted to junctions and station points, which are often 500-600 meters apart (figure 10). The result of these barriers is excessively channelled pedestrian movements, which both decreases permeability and route efficiency and increases contact between people at each intersection. A more permeable and seamless connection between infrastructure for the tram and other modes of traffic that relies on advanced safety measures would eliminate this hazard.

Figure 11. Al Wasl Road Junction Spacing diagram for the Al-Satwa side – property of Systematica srl

Al Wasl Road is a great case study for the role of junction spacing and its relationship with land use structure. It is a vast 50-meter-wide artery running across the city from North to South and with several changing profiles and characters. Here we focus on two opposing sides: the Al-Satwa side and the Um Suqeim side. Driving down from the 2nd December Road to Um Suqeim Street in the Al-Satwa area, one encounters a
vibrant and bustling mixed-use neighbourhood supported by active ground floor use. The street supports both commercial and public functions such as the Satwa Grand Mosque and the Satwa bus terminal along this northern 15km stretch. However, past Um Suqeim Street and extending into the Um Suqeim area, this scene gives way to a low-density residential environment with little to no pedestrian activity. This discrepancy is echoed in the frequency of junctions and signalized intersections on each side, as discussed in results (figure 11).

A third category of observations with a critical (if not fatal) relationship with walkability, and which is a focal point particularly for the fact of Dubai’s hot desert climate, is shading. The harsh climate conditions make walking in the city difficult at least for a third of the year – from June to September. Thermal comfort levels on streets depend on a variety of factors relating not just to climate, but to physical urban structure as well as factors of psychological adaptation (Nikolopoulou and Steemers 2003). Asphalt, for example, is known to contribute to adverse microclimatic conditions. For that reason and for the advantage of extended shading by adjacent buildings, narrower streets make for better walking conditions, as does the reduction of parked cars on the street, which also contribute to a heat island effect. In Dubai as in elsewhere, pedestrians naturally divert their routes to areas of higher thermal comfort such as the shaded side of the street or areas close to at-grade retail where air-conditioning can be felt through entrances. Other tactics observed on Dubai’s streets include using a sunshade or umbrella to minimize direct sun exposure in areas where no other shading features are available (figure 12).
Psychological adaptation research suggests that the amount of time spent walking in harsh climatic conditions influences perceptions of thermal comfort. Repetitive or frequent relief points (such as shaded or cooled areas) along a walking route were found to significantly improve users’ thermal comfort levels and contribute to extended walking times (Al Sabbagh 2019; Al Sabbagh, Yannas and Cadima, 2016). Greenery and vegetation also provide excellent relief from the harsh heat. However, it must be noted that landscape planning is a critical task that has direct implications on the Right of Way. For example, tall trees require large footprints which cannot run under carriageways. Trees planted on medians therefore effectively enlarge the crossing area between sidewalks rather than keeping it compact. Coordination between these competing design elements is thus essential for proper shading utility. Perceived control is another known psychological adaptation feature that has direct effects on how long people spend outdoors or in a given open space. In cases where there is a variety of options for shading and seating, where people could choose their positions with respect to shade, people have been found to spend more time outdoors than in cases where options were limited, or there were no options at all (Nikolopoulou and Steemers 2003). In one such experiment, Nikolopoulou and Steemers (2003) found that people spent more than three times as long in a space where there were several shading/seating options as those in areas where no options were present, under the same climatic conditions.

One of the ways by which the city of Dubai provides shelter from the harsh summer heat is via air-conditioned bus stops. These climate-controlled spaces were introduced in the city in 2007 as a way to mitigate the risks of standing in the heat and thereby encourage public transport ridership. Each structure is an enclosed glass-fronted space holding 8-10 seats and cooled via an air handling unit. In busier stops, two of these standard enclosures could be found side by side to increase occupancy (figure 13).

Figure 13. Air-conditioned bus shelters in Dubai – retrieved from www.arabianbusiness.com
This paper presents the view that these confined climate-controlled spaces have limited viability in the long run and could present more harm than good in the current pandemic crisis. In retrospect, the configuration of this type of waiting space goes against the grain of recent health recommendations by global health authorities. It confines a group of people in a small enclosed space for a significant amount of time where the primary source of ventilation is air-conditioning. Recent studies have suggested that air-conditioning, which essentially redistributes air within a closed area, could prompt the circulation of the COVID-19 virus (and other air-borne pathogens) within the space (Lu et al. 2020; Heil 2020; Bata et al. 2020). Moreover, thermal adaptation studies suggest that the excessive reliance on climate-controlled indoor environments lowers subjects’ ability to overcome outdoor conditions due to high temperature differences (Al Sabbagh et al. 2016). This is particularly relevant in the Dubai case were temperature differences during the summer months reach magnitudes of 20k – well above the advised 4k threshold (Al Sabbagh 2016). Given this information and the shelters’ limited capacity to accommodate higher demands in the future, a design review of these shelters is recommended.

Another critical design aspect of Dubai’s bus stop is its lay-by, or bus pull-out, typology. The lay-by typology is generally considered a suburban typology; it is used in situations where public transport is deprioritized in comparison to private vehicles. In dense urban centres, the pull-out bay area is generally avoided to eliminate unnecessary operational time delays of pulling in and out. Aside from operational concerns, the pull out design has some negative unintended consequences on walkability as well: by essentially cutting away space from the sidewalk, it creates a bottleneck in pedestrian flow in the space behind it, as seen in this case on 2nd December Street (figure 14). A revision of bus stop typology and shelter design could therefore significantly improve waiting time and contagion risk for Dubai’s public transport users.

Figure 14. Lay-by bus stop typology on 2nd December Street – property of Systematica
Main results
The Pedestrian Level of Service analysis of the Palm Jumeirah area showed varied results across the development, from PLOS A to F. The majority of the streets by area (about 60%) lie in the highest pedestrian categories A and B; while about 15% are streets of lowest pedestrian service: PLOS E and F. Smaller and more localized street segments tend to have higher PLOS, while main arteries and roads such as The Palm and Sheikh Zayed Road have lower PLOS values. Since the complex measure is the result of the synthesis of various attributes, which either positively or negatively impact the final PLOS score, the scoring was broken down to its elements for deeper investigation (figure 3b). Variables whose scores were found to positively impact PLOS are sidewalk width (reaching up to 12m) and the presence of on-street parking, greenery or a buffer from vehicles (0-8m wide). In contrast, variables contributing to a lower PLOS are vehicle speed (ranging from 20km/h to 120km/h), number of vehicular lanes (from 1-6 lanes), traffic volume (varying from 50 to +5000 vehicles/H) and the presence of a median on the road, which effectively extends the crossable distance from one side of the street to another.

The Space Syntax analysis revealed some key characteristics about the Dubai street network. The map (5a) reveals that a considerable share of Dubai’s street network has a strong inherent capacity to support pedestrian movement. There is a clear gradual transition from local streets (highest) to main road arteries (lowest). Potential for pedestrian movement is significantly lower in the Deira area. As the subsequent choice maps clarify (5b), the Deira area street network is particularly suitable for longer-distance walking and cycling-reliant accessibility.

The pedestrian modelling of Dubai Business Bay, using CUBE software adapted to predict pedestrian flows, shows that potential pedestrian loads are highest along Al Mostaqbal Street and Al Khaleej Al Tejari 1 Street, with volumes double the average values, and about 6 times the segments with lowest anticipated volumes across the development.

Based on the comparative analysis of street space ratios and their impact on walkability, out of the 36 streets surveyed in Dubai’s urban core, 80% were found to either be adequate for pedestrian activity or require low-cost interventions to reach an acceptable standard of walkability.

Junction spacing strongly correlates with levels of pedestrian activity along Al Wasl Street. The Al-Satwa side has very frequent junctions with distances ranging from 130 meters to a maximum of 300 meters, but junctions on the Al-Suqeim side (mostly right-in/ right-out) are far sparser. Likewise, traffic lights with pedestrian crossings are also far more frequent in the northern segment, recurring every 280-500 meters, while the distance between signalized intersections on the Um Suqeim side of the street varies between 1.5 and 2 kilometres, making it difficult to efficiently navigate as a pedestrian. The study reveals a strong relationship between the two factors: land use structure and pedestrian crossings at junctions. If crossing opportunities are sparse – be it for large building blocks or limited intersections – the level of activity at the ground floor is diminished due to lack of opportunities to quickly arrive at these destinations.
Three retrofitting strategies
Based on the authors’ reading and understanding of the streets of the city, this section provides some key strategies to adaptively retrofit Dubai’s streets in order to combat the current pandemic situation without risking the loss of active modes of travel to private modes in the short run, and to enhance walkability of the city on the long run for all its users with diverse mobility needs.

Strategy 01: Narrowing vehicular lanes and promoting step-free pedestrian infrastructure to increase pedestrian safety, comfort and experiential quality
Narrowing of vehicular lanes on streets is proposed where road space is excessive and could be repurposed as pedestrian space. Counterintuitively, empirical research suggests that wider vehicular lanes contribute to reduced driving safety beyond a limit; collision rates tend to follow a parabolic trend as vehicular lane widths increase (Karim 2015). A potential application of this approach is the case of 2A Street in Al Barsha area: the busy and lively street located near Mall of the Emirates and fronted by commercial activities of diverse natures. The street is essentially a wide two-lane road with on-street parking space on either side and 3.8m-wide sidewalks. The research reveals that lane widths beyond 3.3-3.4m contribute to higher crash rates, as do those less than 2.8m. Thus, by reducing car lanes from 3.4 meters wide to a more conservative width of 2.9, it becomes possible to extend one of the two sidewalks a significant amount without compromising the number of traffic lanes or driving safety (figure 15). The additional 2.2 meters gained help deliver a comfortable pedestrianized space that could be lined with parklets and other street-friendly public space features to soften the edge between pedestrian and road space, improve microclimates and offer recreational value. In that sense, the advantages of decreasing vehicular lane widths benefits both vehicular and pedestrian users. Further studies are required to ensure the viability of such retrofitting strategies under contextual traffic conditions.

Figure 15. Retrofitting Strategy 01 Narrower vehicle lanes on 2A Street – property of Systematica srl
Wheelchair users and users with reduced mobility conditions (such as elderly) can also benefit from a widened sidewalk for more comfortable movement and repeated rest zones. In a similar vein, Al-Sharta Street, which is a local access road located in one of the densest areas of Dubai, could benefit from some improvements to pedestrian infrastructure to support disabled and elderly users. Despite wide sidewalks, this street suffers from frequent curb cuts, which making movement particularly challenging for disabled users. Eliminating curb cuts at parking entry and exit points to promote a step-free environment enhances walkability dramatically for these users. Where it is not possible to eliminate curb cuts, ramped edges are necessary to ensure continuous mobility for users of all physical abilities and mobility needs.

**Strategy 02: Expanding the cycling network by adapting road space for cycle lanes**

Narrower vehicular lanes could also mean the possibility to extend the city’s growing cycling network. As early as 2008, Dubai’s Roads and Transport Authority (RTA) has been implementing a cycle masterplan set to deliver 900km of cycle paths by 2020 (Alta Planning 2008). The linear expansion of the city has made it difficult to maintain pedestrian and cycling at the forefront of the mobility agenda and has made it easier to reach destinations by car. However, as the Space Syntax network analysis shows us, it is possible to create successful centralities efficiently organized around movements of up to 2500m for cycling. Al Wasl Road is an ideal north-south axis with ample space to implement separated one-way cycle lanes on each side of the road, effectively connecting a large area of the city longitudinally (figure 16). Bicycle lanes have the capacity to connect infrastructure-segregated areas, such as in the context of Sheikh Zayed Road, and tend to contribute positively to cycling safety. Despite harsh weather conditions during the summer, Dubai enjoys moderate rain-free weather for 9 months of the year, which is ideal for cycling. Today, cities all around the world are closing off streets to cars and redirecting them to foot and cycling traffic. In Milan, the city added 35km of bicycle lanes in the city centre using cost-effective techniques to facilitate movement during the coronavirus outbreak under its Strade Aperte (Open Streets) plan (Comune di Milano & AMAT 2020). In New York, 100 miles (160km) of streets are being repurposed in the wake of the pandemic to cater to pedestrians and cyclists (NYC Department of Transportation, 2020). With its recent ‘Soft Mobility’ scheme, Dubai could follow suit and embolden its cycling plans further in order to support the goal to reduce car reliance and attract more and more users to active modes of transport. Apart from increasing cycling safety, a dedicated cycling network (with separated cycle lanes) also increase perception of safety, which is commonly cited by women to be one of the leading concerns about cycling in cities, acting as barriers of use (Gorrini et al. 2021). Globally, women tend to cycle far less than men, and especially in countries where the overall cycling modal share is low (Goel et al. 2021). Thus, addressing women’s concerns regarding safety is key to a gender-inclusive mobility system.
Strategy 03: Implementing traffic calming measures and encouraging pedestrian only spaces

The final proposed strategy to deliver safe and comfortable pedestrian infrastructure focuses on the implementation of traffic calming measures. Dubai’s new Soft Mobility Plan, the first phase of which began in the neighbourhoods of Karama, Mankhool and Al Qusais 1 earlier this year, focuses on the implementation of such measures to facilitate walking, cycling and micro-mobility (Government of Dubai RTA 2020). The RTA’s comprehensive plan involves the addition of 2,000 cautionary signs; 77,000 square meters of adjusted pavements, 21 built rest areas, 314 elevated pedestrian crossings and 66 speed-calming devices (Oommen 2020). Vehicle speed is one of the aspects having the most influence on the way a street is used and its character. Lower speeds encourage urban life and promote a high level of user safety, particularly for children. According to the World Health Organization (2018), road traffic injury is the leading cause of death among school-age children and adolescents globally. Moreover, more than half of road deaths are related to vulnerable users such as pedestrians and cyclers. The opportunity to reclaim streets for these vulnerable users greatly enhances child user safety and their inclusion in public space, as evidenced by the Freiburg Green City project in Germany, to take one example (Voce 2018).

Al-Fahidi Street is one of several streets in the bustling area of Bur Dubai that have a very active frontage and high pedestrian activity all day long. In a comprehensive study of vehicle speeds on all 36 streets under study, Al-Fahidi Street was found to be one of few where vehicle speed is already quite low – in the ‘pedestrian street’ category (figure 17). However, its design is oriented towards vehicular movement. To that end, the Al-Fahidi Street acts as an ideal prototype for the shared street model. By eliminating borders and shifting the balance between vehicle and pedestrian space, the 12-meter-wide street adopts a flexible right-of-way: it becomes pedestrianized while allowing moderated vehicular flow to continue as normal, but giving off most of the street to pedestrians and cyclists (figure 18). The addition of road signs and bollards could ensure smooth interaction between different road users at different times, thereby increasing overall street safety. In London, the idea of ‘low-traffic neighbourhoods’ (LTNs)
whereby streets are completely closed to non-local drivers is being rolled out in several areas; targeting 114 neighbourhoods in total (Surico, 2020).

**Conclusion**

This paper offers several starting points for adapting Dubai’s streetscape to make it more walkable year-round. Starting from the Space Syntax network analysis, it is clear that the street network of Dubai – the blank canvas – creates a good foundational
structure to support pedestrian connectivity. This is an important finding in itself because it limits issues of walkability to organizational aspects, eliminating the need to reconfigure streets, block sizes, etc. The paper discusses several ways in which the current organization of street space is disproportionately geared towards vehicular movement. Besides the well-known negative environmental impacts of car dominance on the urban environment, a mobility landscape that prioritizes the car tends to systemically discriminate against user groups that predominantly rely on public modes of transport, for whom alternative infrastructure is given less priority and is often underdeveloped. Examples of such users include low-income groups, immigrants, elderly and disabled users. Moreover, car dependency significantly affects the potential to promote active modes of transport in the city, such as walking and cycling, not in the least because of the added safety concerns caused by the omnipresence of these high-speed vehicles across the city. In that sense, the call to reclaim streets for pedestrians and vulnerable road users is intricately tied to the call for a more equitable, inclusive and balanced mobility system.

Analyses presented in this paper highlight the importance of relational space issues. The 36-street analysis of space distribution highlighted the importance of looking at the ratio between road space and sidewalk space, rather than sidewalk width alone, to determine the level of walkability of a street. In Dubai, sidewalk width is seldom the problem. As seen in the aforementioned study, sidewalk space is commonly generous with an average combined width of 8.5m (more than 4m per side). However, for the majority of the sample, sidewalk space is considerably offset by vehicular space (average ratio of 0.3), making wider streets less pedestrian-friendly. The scale of interventions required, however, is minimal for most of the streets in the survey sample.

Grid permeability is another area of concern when considering walkability. As demonstrated by the Al Wasl Street case study, the frequency of junctions and pedestrian crossing points can greatly influence the volume of pedestrian activity on different segments of the same street. Frequent intersections, pedestrian flow and active frontages tend to go hand in hand, as seen on the Al Satwa side of the street, where signalized intersections are 4 times more frequent than on the Um Suqeim side, on average.

The role of co-dependent factors is strongly emphasized within the paper. We’ve seen examples from Dubai’s streets where despite inefficient pedestrian infrastructure, pedestrian movement prevails due to productive dynamics of land use and density (Al Satwa Road). Measures of safety and comfort are even more pressing in these street segments where pedestrian flow is naturally higher. Conversely, we have seen areas where despite adequate sidewalk space, pedestrian flow is minimal due to low at-grade commercial activity and infrequent junctions (Al Wasl Road in Um Suqeim) or due to physical barriers such as the tram line (King Salman Bin Abdulaziz Al Saud Street). The paper thus holds that pedestrian infrastructure planning must be dealt with as a complex, multi-dimensional and integrated effort that reconciles various interdependent elements.

While street surveys and direct observation can offer critical insights about the functionality of pedestrian space at the experiential level, mobility metrics and mapping tools provide a complex reading of how various competing factors play out and an understanding of how each influences the whole. These tools therefore help to easily identify cluster areas for optimization. For example, the choice models using Space
Syntax identified the Deira district as an area whose network renders it more suitable for travel by cycling. Likewise, pedestrian simulations of the Business Bay area helped us predict segments along internal routes with the highest perceived footfall. Applied to other projects and at wider scales, such data opens up space for more targeted plans and location-specific interventions to enhance walkability prospects.

The retrofitting strategies proposed in this paper focus specifically on those aspects with direct implications in the COVID-19 era. Based on the collective reading and understanding of Dubai's street structure, these strategies are composed of targeted, measured actions perceived to have a major influence on the potentials of the city to support a modal shift to walking and other low-impact travel modes. Climate-controlled bus stops are a particular product of Dubai's unique relationship with the urban space dictated by its climatic conditions and cultural norms. The current situation presents an opportunity to rethink these relationships and devise new ways to articulate evolving and competing demands. Fit to measure, these concepts can be applied to other cities in the GCC region facing similar issues. As Rahm Emanuel, former Mayor of Chicago and former Chief of Staff for the Obama administration, asserts: "Never allow a good crisis go to waste. It's an opportunity to do the things you once thought were impossible" (Emanuel 2020). The current pandemic situation is an opportunity to tip the scales, to reorganize public space in a way that complements our long-term goals for the sustainable and equitable city, while making sure to navigate the current state of affairs without compromising public health or safety. Ultimately, the current situation is an opportunity to test the potentials of Dubai's massive street infrastructure to cater to a wider variety of users and transport modes; an opportunity to convert its ‘leftover spaces’ into core assets; and to incrementally direct the city towards a more inclusive and resilient future.

References
The Redemptive Potential of the Street.


New Typologies of Contemporary Shopping Malls in Egypt

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Abstract
Contemporary shopping malls in Egypt have created new public spaces for lifestyle and leisure, which complement the commercial logic of consumer behaviour. Mega malls in Egypt are simultaneously merging shopping, leisure, and entertainment, creating an ambivalence. They are representations of the globalized economy, but also manifest a certain uniqueness through their typology, their mode of insertion in the urban fabric and the type of public spaces created in them. This paper traces four new typologies in the design of six mega shopping malls in Egypt, constructed since 2010, as they integrate new public gathering spaces for leisure, recreation, and entertainment. Data on the new malls in Egypt was collected from corporate websites and promotional brochures, Google Maps and Street View, TripAdvisor, social media websites, visitor comments and news articles. A key finding is the trend of integration of large outdoor recreational spaces such as courtyards and plazas in mall design, the inclusion of a water element for attraction as well as the transition in function from simply offering goods and services to one that offers experiences and events to encourage recurring visits to the mall. The transformation of the mall parallels changes in conceptualizing the city of the 20th century as a large marketplace, an emporium of consumption, to conceptualizing the city of the 21st century as a large theatre and a festive place.

Keywords: megamalls, quasi-public space, hybridization, satellite cities, lifestyle shopping

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Introduction
The overall design typology of a shopping mall does not differ much across the globe. It is a very familiar environment that caters to tourists and global citizens. It joins other building types that are globally homogenized such as hotels, resorts, gated communities, airports, etc. The shopping mall is detached spatially, socially, and culturally from its immediate context. Despite being conceptualized as a form that evolved from its predecessor – the department store – that was integrated within the city, the detachment of the shopping mall has ‘satellized’ the city (Baudrillard, 1994; Clarke, 2003) creating ‘a city within a city’ where “[s]hopping does not take place within the city; the city takes place within shopping” (Miles, 2012, p. 84). The shopping mall created a new quasi-public space in the city where the shopper is enclosed in a self-contained and irresistible environment.

From a cultural perspective, the space of the shopping mall leads to cultural hybridization, hybridity in consumerism, hybridity in mass culture and everyday habits, hybridization of food. It is the creation of something new, an American culture fused with the local culture. A shopping mall in Egypt is also a place of social and cultural escape. Abaza (2001) points out how teenagers flock to malls to escape the purview of their parents and how women escape their conservative societies and patriarchal dominance by fleeing to the shopping mall. In such a sense, the mall is a gendered space and a place of refuge, a world of fantasy that visitors frequent to purchase hope and create aura (Jacobs, 1984).

The shopping mall is paradoxically a modern building type invented in the U.S. yet at the same time an archetype of the postmodern city (Clarke, 2003; Miles, 2012; McGreevy, 2018). The mall is a space of consumption, a controlled and sanitized environment, a simulated and themed environment, a Foucauldian heterotopy, an illusory space, a phantasmagorical environment (Miles, 2012). A positive aspect of the postmodern environment of the shopping mall is its inclusive character and pluralism. Nevertheless, shopping malls have been criticized for creating exclusive spaces for higher income groups (Carmona, 2010).

The proliferation of shopping malls is a testament to the physical domination of consumption upon the urban fabric (Miles, 2012). Shopping malls are usually enclosed spaces that are oriented internally around a skylit atrium or food court. They are characterized by an introverted architecture where the façade turns its back to the surroundings while at the same time the interior creates an attractive ambiance for the flaneur to see and be seen. The shopping mall creates an exclusionary environment that invites upper echelons of society, middle- and upper-class consumers while excluding the lower-class and the poor. The shopping mall is also a place of construction of cultural identities and hybridization of cultural norms of tourists with local visitors, a hybridization induced by new styles and trends that are promoted in international stores dotting the mall.

This paper investigates and analyses the design of six mega shopping malls in the Greater Cairo Region erected during the last decade, that integrate new public gathering spaces for social interaction, leisure, recreation, and entertainment. The main research question that guides this paper is: How has inclusivity been enhanced by the introduction of outdoor public gathering places and the integration of leisure and entertainment functions in the design of the shopping mall. The objective of the paper is to understand the shift in place-making strategy in the form and function of malls while
linking these changes with the quality of place experienced by users of the mall. The research is exploratory with the aim of shedding light on new trends in the Middle East in the creation of new landscapes of high-end consumption.

Methodology
The paper captures the major shopping mall projects in Egypt constructed since 2010 to the present. A short description is provided for each mall to give some background information on the mall. User experience was collected from social media websites and comments were collected from TripAdvisor. Photos, floor plans and maps were collected from corporate websites, Google Maps, Street View, and Foursquare User Guide. Maps helped in understanding the layout of each mall and its insertion in the urban fabric. Floor plans showed the different functions of spaces in the mall, their location in the architectural program, and areas designated as open space. A schematic diagram of each mall was constructed by the researcher to simplify the categorization of the typology of the mall.

Emergence of shopping malls in Egypt
When Victor Gruen envisioned the shopping mall, he conceptualized it as a community centre to counteract the unliveliness of the suburbs. Victor Gruen realized that the North American suburban ‘desert’ needed to reify communitarian values through a new building type, a shopping centre organized around a pedestrian mall to solve the problem of suburban environments in North America. The shopping centre was an agent of recentralization (Miles, 2012) and re-agglomeration (McGreevy, 2018), a multi-purpose centre that integrated commercial activities with cultural and entertaining activities as well as social events. However, the communitarian values envisioned by Gruen boiled down to the demands of a consumer capitalism. The variety of shops and services that would cater to the needs of suburban residents became reduced to luxury shopping and a commercial formula set on making the most profit, the single-bottom line. The subsequent recreationalization of shopping malls has also stripped it of its communal function (Miles, 2012).

Despite being an American invention and global archetype, shopping malls do not necessarily fulfil the same functions in the Middle East, Southeast Asia, or Latin America (Abaza, 2001; Dávila, 2016). Although shopping malls across the globe look the same physically, they are differentiated socially by the demographics of patrons going to the mall, location of the mall within the city, proximity to affluent or low-income neighbourhoods, as well as local variations due to different settings and other uses in proximity to the mall. Egyptian malls are not only for shopping purposes but also meeting places especially on weekends and holidays for whole families and teenager groups. Shopping malls in Egypt have created new public spaces for leisure which complement the commercial logic of consumer behaviour centred on strolling and vitrine shopping. While contemporary shopping malls in Egypt are representations of the globalized economy, they also manifest a certain uniqueness through their typology, their mode of insertion in the urban fabric and the type of public spaces created in them. “In Egypt, there has been a reshaping of public space to merge mall shopping with leisure (movie houses, billiard rooms, discotheques, ice-skating rinks).” (Abaza, 2001, p.
New Typologies of Contemporary Shopping Malls in Egypt

107). The mall is simultaneously merging shopping, leisure, and entertainment, creating an ambivalence.

For example, the first typology of insertion of shopping malls in Egypt was their construction near popular markets such as the insertion of the Cairo World Trade Center in 1990 within the popular quarter of Boulaq, near Boulaq market (Abaza, 2001). As Abaza notes, the World Trade Centre in Cairo has a new conception of shopping as leisure space with a central atrium open space, designed symbolically in the form of a covered popular market, a ‘wekala’, with wooden screens. This typology appears as the juxtaposition of two types, the traditional market that is integrated with the surrounding social and physical fabric of the city and the modern mall that is detached from the surrounding social and physical environment, a detachment and privatization of space that has caused gentrification and the dislocation of the poor.

Other examples by Abaza (2001) are the Yamama Center in Zamalek district, the first mall ever constructed in Cairo in 1989, malls constructed in the mid- and late-1990s in Nasr City (e.g. Geneina Mall – 12,000 m², Tiba Mall (also known as al-Aqqad Mall) – 30,000 m² and al-Sirag Mall – 14,000 m²), and the First Giza Mall in the district of Giza. The Yamama Center is a vertical mall with nine floors and GLA 4,000 m² whose main patrons were students from nearby faculties as well as Saudis and visitors from the Gulf area. The malls in Nasr City had cinemas, coffee shops, bowling and billiard rooms, video and laser games, a gym, mega screens, a skating rink, and children’s game arcades (Abaza, 2009). Some of the malls in Nasr City also included residential apartments at higher levels above the shopping spaces. While Tiba Mall attracts families, Geneina Mall attracts teens and youth. The First Giza Mall was constructed in 2013 and covers over 10,000 m² of retail space in 3 floors with 60 upscale boutiques stores for the luxury shopper and one restaurant. The First Mall is considered Egypt’s capital for high end international brands such as Bulgari, Rolex, Omega, Tiffany & Co, Bally, Zegna and Paul & Shark. La Gourmandise Brasserie, a cafeteria in the middle of the airconditioned mall, surrounds a fountain and a catwalk for fashion shows. It caters mainly to Persian Gulf Arab customers (Abaza, 2009).

Contemporary Mega Shopping Malls in Egypt

Shopping centres in Egypt have transitioned from a vertical multi-storied urban mall (organized around an enclosed central atrium and integrated in a wider commercial residential development with office towers and hotels), inserted close to traditional markets and popular low-income neighbourhoods to a horizontal suburban mega mall inserted in new satellite cities like New Cairo and 6th of October City for high-income and upper-class suburban residents. These social spaces for public gathering are new focal points in these newly built cities and have siphoned out liveability of open public spaces in nearby neighbourhoods (Elhusseiny and Kesseiba, 2019). Built along the ring road and major transport corridors, the new mega malls are accessible mainly by car and are designed as destination places for leisure, recreation, and entertainment alongside shopping. Built in the desert, mega malls in Egypt are influenced by the design of malls in the Gulf Area especially those malls that were designed by the same private corporation, Majid Al-Futtaim Group, that expanded its operation of malls in Dubai and Abu Dhabi to encompass cities in Egypt and other middle eastern countries in the
region. For instance, it is not by coincidence that the Mall of Egypt has an indoor skiing area following the same imported model of the Mall of Emirates in Dubai.

Egypt has witnessed an increase in the number and size of shopping centres over the past three decades. The 1990s could be called the decade of malls in Egypt with a record of 24 malls in Greater Cairo by 2003 (Abaza, 2009). Regulatory changes in Egypt in 2004 and deep cuts in Customs duties opened Cairo to international consumer goods. Luxury retail emerged in Cairo on a significant scale in late 2005 (Group, 2010). Cairo’s first international-standard shopping mall, City Stars Mall, was the biggest mall in 2005. City Stars is a vertical multi-story mall with 150,000 m² gross leasable area, 70,000m² of retail space for over 650 multinational stores and local boutiques, a 14,000 m² hypermarket, two indoor theme parks, a 21-screen multiplex cinema, a modern indoor market that is a simulation of the bazaar Khan el Khalili, three hotels, a food court, and a large exhibition space. Following City Stars was Cityscape Mall in 2010, a multi-story shopping centre, four floors, with informal eateries, open air terraces, restaurants, a food court, total area 21,000 m², 100 commercial shops, a 2000m² hypermarket, artificial lake of 2000 m² for occasional festivals and celebrations.

Thereafter, four mega shopping malls were constructed in the years 2010 to 2017, with gross leasable areas between 100,000 to 200,000 m². They are Mall of Arabia in 2010, The District Mall in 2014, Cairo Festival City in 2013, the Mall of Egypt in 2017, and City Centre Almaza in 2019. A sixth mega mall, Cleopatra Mall, is currently under construction. A seventh mega mall, Katameya Downtown Mall in New Cairo will be added to the list in 2021 with a GLA of 110,000 m² for 230 retail shops and 32 cafes & restaurants. The construction of other internationally modelled malls north of Cairo, in the Delta region, are also starting to proliferate such as the Mall of Tanta, completed in 2019 with GLA 40,000 m², and Mall of Mansoura, to be completed in 2021 with GLA 50,000 m².

This paper traces new typologies in the design of mega shopping malls in the Greater Cairo Region as they integrate new public gathering spaces for leisure, recreation, and entertainment. A major trend is the integration of large outdoor recreational and dining areas as well as a transition from simply offering goods and services to one that offers experiences and events to encourage recurring visits to the mall. The layout for mall designs and functional spaces was referenced from websites of each mall except for the District Mall whose website was still under construction. Google Maps was also a source of information for mall layouts, 3D views and street view photos. Other websites such as social media sites (Facebook and Twitter) and Trip Advisor were also used to gather information on events, promotional videos, and customer reviews.

1. **Mall of Arabia**

   **Description / Background**

   The Mall of Arabia, constructed in 2010 with more than 200 stores and GLA 110,000 m², has a recent extension called The Expansion, a luxury retail section (see lower section of Figure 1) with premium end brands on par with what a shopper would experience internationally, with shops having 12 m frontages rather than the typical 6 m, a food hall, and a park. Mall of Arabia recently announced the opening of a drive-in cinema, which will be the first of its kind in Egypt. Numerous drive-in entertainment venues like cinemas and concerts have been introduced in response to the spread of
the global coronavirus pandemic. Mall of Arabia’s main anchors are Spinney’s hypermarket, a Cinema-plex, and an indoor play area, Billy Beez, with reverse bungy jump and a nearby entertainment 7D Simulator for an immersive cinematic experience. In the heart of The Expansion is a large courtyard that offers an outdoor space for public gathering. The courtyard contains a park, having an area of eight acres, that expands the experience of outdoor lifestyle shopping (see Figure 1) while including an outdoor kids’ zone and a large playground for children (see Figure 2).

Figure 1. Bird’s eye view of Mall of Arabia showing the extension surrounding The Park. (Source: Marakez Egypt, author annotation overlay)

Figure 2. The Park at Mall of Arabia offering an outdoor lifestyle shopping in a park setting within a courtyard extension of the mall. The figure shows the running track. (Source: Google Maps Street View)
The Park has frequent events and live music on weekends to keep kids engaged. It is the first mall in Egypt to include a landscaped park as part of the mall experience with platforms for yoga practice and a running track for recreational sport activity. The goal is creating a lifestyle experience that positively impacts the community other than typical mall shopping. There is a coffee shop called Qahwa, which literally means coffee, overlooking the playground where parents could enjoy sitting, chatting, and sipping a coffee while observing their kids.

![An outdoor play area for children within The Park of Mall of Arabia](source: Google Maps Street View).

**Public gathering places**
The Mall of Arabia has an introverted architecture with solid façades on its exterior and two open courtyards. The first courtyard has a tent canopy covering a food court that opens onto a raised water fountain. The water element acts as a focal point for seating areas of the surrounding cafes and restaurants. The water fountain is an aesthetic feature that encourages outdoor seating and helps with acclimatizing to hot weather. The second courtyard is a recent extension to the mall and has a park and playground. The public gathering courtyard spaces complement the commercial shopping activity. However, designers of the mall seem to have conceptualized the strolling activity of vitrine shopping within the enclosed space as separate from the outdoor gathering space designed for passive and active leisure activities.

**Insertion in the urban fabric.**
The Mall of Arabia is still organized like an indoor mall as all its corridors are double loaded with shops that are inward oriented and form a closed circular loop. This separation may be beneficial by offering respite for those enjoying the outdoor gathering spaces from the efficient and controlled space inside the mall. It balances spaces of leisure and free movement with spaces of consumption and linear movement. In the end, however, it is not an outdoor shopping mall. Designers intended this contrast between indoor and outdoor spaces to introduce a lifestyle dimension to the mall (yoga platforms, running track, fountain seating and park) that complements the commercial function. They want the mall to be a destination place for repeated visits by
offering a variety of secondary activities such that mall goers incorporate the mall in their everyday practices in addition to their weekend or holiday shopping. Nevertheless, despite this aim, these new gathering spaces are still appended and subservient to the functioning of the mall as an efficient emporium for consumption. The following figure is a schematic diagram for a model of the mall showing spaces for public gathering in the outdoor courtyards.

![Schematic diagram of the lifestyle model for Mall of Arabia in 6th of October City.](image)

**Figure 4.** Schematic diagram of the lifestyle model for Mall of Arabia in 6th of October City.

### 2. **District Mall**

**Description / Background**

The District Mall opened in 2014 and is located close to Cairo International Airport with GLA of 194,000 m². It is an open-air mall having a pedestrian friendly environment with year-round family events, kids’ activities, and live music and entertainment. It has 243 units for retail, food and beverage, entertainment, and leisure. The food and beverage zone has a stunning combination of over 15 coffee shops and restaurants (International, Italian, and Oriental and Lebanese cuisine) with both indoor and outdoor seating areas. There is an outdoor stage set for live shows and music bands. A main feature of the mall is an artificial lake (see Figure 5) that accompanies the movement of pedestrians along a stone path with a herring bone pattern. The artificial lake offers pleasing views to customers seated in restaurants and cafes surrounding the lake. An island in the middle of the artificial lake is reached by a bridge and leads to a café and an outdoor stage. A sunken pirate ship in the middle of the lake adds interest and a theme to the mall environment. Escape game rooms at Hint Hunt, a franchise, offer social gaming experience. Kids can take a train-on-wheels to tour the mall. The intention behind the design of the open-air mall is to offer a public space of gathering throughout the year for live events, bazaars, music, and street festivals. The slogan in the mall’s logo reads: “Where a day is not enough”.
Public gathering places
Reviews by customers see the quality of services in decline compared to when it first opened. Those who frequent the mall lately are seen as low class. It is a nice place for family gatherings, celebration of birthday parties, and photography events as well as being a safe place for kids to play but does not come across as a state-of-the-art mall in regard to the presence of international retail shops. It has a lot of small partitioned shops or kiosks.

The ambience is noisy and crowded during holidays and weekends especially with the noise of airplanes that take off or land very frequently to the nearby airport. It also has
limited parking space which is also not free like parking lots in other malls. The District Mall mainly serves as a space of leisure and relaxation than a space for shopping like a typical mall. Figure 6 shows a schematic diagram of public gathering spaces in the mall with the artificial lake as an organizing element for the mall layout.

**Insertion in the urban fabric**

The District Mall is located in proximity to Cairo International Airport and located just across a private club. Proximity to the airport allows easy access with an influx of tourists and visitors causing crowdedness and a sense of inclusivity with people from many backgrounds and social groups frequenting the mall. The Mall is on the other extreme of mall types, being mainly an open-air mall. The commercial functionality takes a secondary role while leisure and dining functions are primary. Proximity to the private club gives a stark contrast to the public accessibility of the mall space with the private restricted access of the club.

### 3. Cairo Festival City Mall

**Description / Background**

Cairo Festival City Mall (CFCM) is a regional shopping centre located in New Cairo and has over 300 stores and 95 restaurants and cafés with GLA of 158,000 m². It is a shopping, dining, and entertainment hub that offers an indoor-outdoor retail experience for the first time in Egypt. CFCM has a central space that hosts musical shows with a dancing water fountain that represents the core of public gathering and social interaction with restaurants and cafés surrounding the water feature. The fountain is animated with water jets and shooters that provide spectacular performances of water, music, and light. The open outdoor public space encompassing the fountain and complementing the mall, called the Village, has 50 cafés and restaurants, and hosts occasional events, festivals, and live performances in the open-air Amphitheatre that accommodates up to 1,200 guests. Because this gathering space is not enclosed, users from different socio-economic levels have more freedom accessing the space (Elhusseiny and Kesseiba, 2019) compared to access of courtyard spaces of the Mall of Arabia. An indoor theatre opened in 2015, the Marquee Theatre with a capacity of 1,656 seats, complements the Amphitheatre with international performances and concerts. The main mall has three floors of world-class shops with famous brands, local shops, and kiosks as well as a massive food court that includes international eateries and local delicacies. The main anchor stores are IKEA, a hypermarket and four department stores Marks & Spencer, H&M, Zara, and UK retailer, Debenhams. Leisure and entertainment options include trampolines, a climbing wall, a ropes course, an obstacle Ninja warrior course, ice skating, a kids' zone and play areas such as Kidzania, Playdate, Magic Planet and Wiggly Jungle, a pre-school and interactive educational environment, and over 15 cinemas with 4 VIP luxury halls. One could spend on average of four or five hours in the mall in a single visit.
Figure 7. View of CFCM in New Cairo, 5th Settlement.
(Source: Foursquare City Guide – User Photo)
CFCM plans an expansion called the Festival Avenue of GLA 22,000 m$^2$ (with a 5,300 m$^2$ skylight) opening in 2022, making it the largest mall in Egypt. The expansion will comprise 120 new retail units including 60 international brand luxury boutiques (bringing several new brands to Egypt for the first time) as well as a 1,600 m$^2$ Food Hall with 20 new dining options of international cuisine, and a new elevated entertainment complex for games and leisure activities for all age groups. A new mobile application with voice technology using a newly developed Omega platform (Al Futtaim, 2019) will
combine traditional retail with modern artificial intelligence technology, while also promoting social networking.

**Public gathering places**

The following figure is a schematic diagram of CFCM. The public gathering space (fountain, water pool, amphitheatre, seating areas, steps, and stepped platforms) and outdoor retail kiosks and outlets complement the indoor shopping experience. The architecture and form of mall buildings is basic rectangular shapes, not distracting, and acts as a background to the festive and commercial space. Unlike the enclosed experience of the Mall of Arabia or the open experience of the District Mall, the CFCM succeeds in combining the best of both models, the enclosed mall, and the open mall, while expanding the role of landscaping of the public space by including water features on several levels, lighting of exterior stairs, large screens for display of events such as soccer matches and advertisements, and the amphitheatre to encourage lingering in the mall while being entertained. Another factor contributing to the success of the mall is its location in New Cairo serving several old and new residential neighbourhoods. The mall attracts customers such as tourists by capitalizing on the experience of shopping tourism as well as locals who come to the mall on weekends and holidays to experience a lively public space where there is a mixing of cultures.

*Figure 9. Schematic diagram of CFCM showing the dancing fountain unifying the spatial organization of the mall*

**Insertion in the urban fabric**

CFCM is part of a larger urban project, the Cairo Festival City and thus integrates better than other malls that are conceptualized in isolation as a single project. The CFCM is able through its insertion in the urban fabric to be better integrated and accessible, being placed along the ring road, located in the prestigious 5th Settlement residential area, and close to high-end gated communities. The mall also connects to other retail hubs in the area, forming a larger network of consumption and affluence. CFCM combines the typology of a typical enclosed mall with a larger shopping centre of which it forms a central part. The larger shopping area includes large, big box retail such
as IKEA. The key role the mall plays in the urban function of the city is evidenced by the recent expansion for the mall that started in the first quarter of 2020, aimed at enlarging the customer base by adding international brands and high-end shopping experience.

4. Mall of Egypt  
Description / Background
Mall of Egypt opened in 2017 in New Giza, west of Cairo. It has 350 stores on 2 levels with GLA 165,000 m², just a little smaller than Mall of Qatar that opened a year earlier, in 2016, with GLA 195,000 m². It obtained LEED Gold certification in December 2019. Modelled after the ski area in mall of Emirates in Dubai, the Mall of Egypt includes the first indoor ski slope in Africa - Ski Egypt (an area of 22,000 m² and 200 m slope), with 10 live penguins to raise awareness about Penguins and environmental conservation, and a Polar Express Train ride. It also includes a 16-unit Food Court, a 21 multi-screen Cinema complex and Magic Planet entertainment centre. The mall offers a family-centred sense of community by focusing on entertainment and the experience of the consumer rather than being merely an inert experience from a serial collection of retail shops. Unlike the previous three malls discussed in this article, the Mall of Egypt consists of three themed zones to differentiate the consumer experience strolling within the mega mall.

Figure 10. Wood screens combined with panes of coloured glass shade the façades that overlook the open-air plaza with landscaped garden, seating areas, and water feature.  
(Source: Foursquare City Guide – User Photo)
The first zone is called “The City” and mimics a street lined with retail and family-friendly spaces. The second zone is called “The Desert Valley” which has a central atrium for music and cultural events surrounded by an upscale department store and international retailers. The third zone is the leisure and entertainment zone called “The Crystal” that consists of a family entertainment centre, the cinema complex, and the indoor snow park. At one end of the mall there is an open-air plaza for public gathering called The Plaza (see Figure 10).

Figure 11. View of the plaza at night as a public gathering space. Large screens are mounted in the plaza so customers can follow live soccer matches (Source: Foursquare City Guide, User Photo)
New Typologies of Contemporary Shopping Malls in Egypt

Public gathering places
The following figure is a schematic diagram of the mall layout. It shows the entertainment zone and the plaza. The plaza has a formal landscape with sculptures/statues and transforms the shopping experience to one of leisure and casual dining. The mall visually connects with the open-air plaza through glass façades and terraces of restaurants. The major focus is on the plaza as a public gathering place to encourage lingering and socialization. The plaza shapes the main façade of the mall and acts as a welcoming entrance. The other four sides of the mall do not integrate open spaces and seem to replicate the negative aspects of North American malls in that they do not add to a lively urban realm or connect with the external landscape as the plaza area does.

Insertion in the urban fabric
As the CFCM dominates the east side of the Nile Valley of New Cairo, the Mall of Egypt dominates the west side of the Nile Valley of New Giza. The naming of the mall itself aspires to dominate the whole Egyptian shopping landscape. The Mall of Egypt is even more advantageously located than the CFCM. In addition to integrating with surrounding residential high-end communities such as 6th of October City and Palm Hills, the Mall of Egypt integrates with other hubs of entertainment and a private club. The mall is located just across from the Egyptian Media Production City and further east along ElWahat Road is Dream Land and Dream Park which are major family attractions. The more the urban context is vibrant and active with complementary functions, more visitors are more likely to frequent the mall.
5. City Centre Almaza Mall

Description / Background
City Centre Almaza is built in Nasr City district in the Heliopolis region close to Cairo International Airport, not far from the District Mall. Almaza City Centre is part of a series of malls by Majid Al Futtaim that includes the Mall of Egypt and City Centre malls in Alexandria and Maadi. Following the City Centre Brand, City Centre Almaza has three shopper precincts: the value shopping precinct anchored by a hypermarket, a fashion precinct anchored by international store brands and a couple of department stores, and a leisure precinct anchored by a cineplex, an entertainment centre and an open-air plaza with 12 restaurants. The vision of City Centre Almaza mall is to create a regional mall attracting visitors from the affluent suburbs of Cairo and Giza by merging world-class retail experience with world-class entertainment. The mall opened last year, in September 2019, and has 270 stores with GLA of 103,000 m². The site is planned to have an expansion in the future. The mall features 23 restaurants, 18-unit Food Court, 9 cafés, a 16-screen multi-plex cinema, a 13,000 m² hypermarket, and main anchor stores such as Debenhams and Marks & Spencer, a special indoor area for kids called Little Explorers and a 1,800 m² area for leisure and family entertainment (Magic Planet, an indoor ride, an indoor trampoline park). It has recently obtained LEED Gold Certification by the US Green Building Council on April 24, 2020, for reducing energy consumption and water use. An open-air plaza called the Restaurant Courtyard has restaurants that offer casual and fine dining experiences surrounded by water features, a pop-up market, and an outdoor area for games (two soccer fields).

Figure 13. Seating areas and restaurants surrounding the outdoor courtyard of City Centre Almaza. (Source: El-Khawaga, 2019).
Public gathering places
The following figure is a schematic diagram of the mall layout. The diagram follows a typical indoor mall layout with the many negative aspects associated with this typology. There were plans to include a 250 m ski slope, which would be larger than that in the Mall of Egypt but was not realized. Remarkably, the open courtyard is placed in close proximity to the Cinema and Food Hub. This courtyard is the main socializing space of the mall and contrasts with the rest of the commercial functions of the mall. Unlike the Mall of Egypt, the Family Entertainment area in City Centre Almaza is totally separated from the Cinema.

Insertion in the urban fabric
The mall is located at the intersection of ElNasr Road and ElSuez Road. Despite its location at a major arterial intersection, it competes with attracting customers from other nearby malls within the Nasr City area such as City Stars, a mall which dominated the mall landscape in Egypt during the first wave. City Centre Almaza depends on its branding to attract customers. However, it is disadvantageously located in an area that has many light industrial functions, administrative buildings, military institutions, auto dealers, etc. These functions do not synergistically complement the functions of the mall.
6. Cleopatra Mall

Description / Background
Cleopatra Mall is currently under construction. The project has been delayed due to the Arab uprising and political turmoil in Egypt. The concept of Cleopatra Mall presents a unique fusion of interior and exterior spaces to create an attractive shopping and entertainment experience. Cleopatra mall is located in Al Sheikh Zayed City with GLA of 115,000 m² and features 300 shops on 4 levels with a luxury district in the mall, a fresh market, and a 14-screen Cinema complex, an educational centre for children, active sport facilities where visitors can surf, climb and sky dive, a food court with seating capacity of 2000 and 70 food outlets, a spa, a VIP lounge and a GLA of 10,500 m² dedicated to leisure and entertainment. A key feature of the design is a 20,000 m² artificial lake that includes waterfalls, a musical fountain with laser beam displays in the evening, and aquatic shows.

Figure 15. Schematic diagram of City Centre Almaza Mall

Figure 16. Conceptual rendering of Cleopatra Mall showing a symmetrical design of the retail commercial area flanked by an office and a five-star hotel. (Source: Design International)
The artificial lake is surrounded by restaurants and has a large multimedia display. A gigantic canopy covers the central area of the mall and spans 200 m. The central Cleopatra court targets the accommodation of 465 shows/events per year. It will be the first mall in Egypt to open 24 hours and offer nightlife entertainment with elaborate light shows and live music bands.

Public gathering places
The following figure is a schematic diagram of Cleopatra Mall.

The schematic of the mall shows the emphasis put on the main entrance of the mall to be welcoming and inviting through the use of water elements, sitting areas, and dining areas that herald the function of leisure that is in contrast to the backend half of the mall that emphasizes the strictly commercial and typical layout of an indoor mall.
clearly evidences the ambivalence that is shaping the design of malls when bridging outdoor spaces of recreation, entertainment, and leisure with indoor spaces typical of the global mega shopping mall type.

**Insertion in the urban fabric**

The mall is located within Sheikh Zayed City in New Giza along a major corridor of its intersection with Alexandria Desert Road that connects Cairo to Alexandria. Within the same urban block, there is a campus for Cairo University and a new hospital. The mall is also inserted within a wider commercial area and across from a water park called Crazy Water. The organic shapes of the mall echo the circular street pattern of residential districts in Sheikh Zayed City. The mall is not far from the Mall of Egypt and therefore competes with attracting visitors to the mall.

**Four new typologies of public spaces**

We see in these six mega malls several ways of diverging from the typical North American enclosed mall type.

(1) **The first type** of public space identified in these new Egyptian mega malls is the open-air courtyard, enclosed within the mall. This type is used in the Mall of Arabia and City Centre Almaza. One configuration of the courtyard type is surrounding the courtyard with terraces of casual and fine dining restaurants while placing a landscape feature in the courtyard such as a water fountain or artificial lake to act as a visual and aesthetic focal point. A second configuration of the courtyard type is landscaping the courtyard for active and passive leisure activities such as the expansion of the Mall of Arabia to include an enclosed open-air courtyard that is landscaped with a running track, a park, and a playground.

(2) **The second type** of public space is the plaza usually placed at a main entrance to the mall. The plaza acts as a meeting, seating, lingering, and gathering space. We see this type in the Mall of Egypt. The plaza in this mall type is defined by the restaurant terraces and by the entertainment zone with cinemas, family entertainment, and the snow park. The plaza acts as a receptacle or large outdoor lobby for the mall. The plaza is landscaped with sporadically placed statues and water features such as small water fountains and a green area. These features are not a visual focal point for the space but rather define the ambience of the plaza. The plaza type is seen in Cleopatra Mall at its main entrance. The plaza type is also identified at the CFCM but has a larger scale and uses different landscaped levels than the Mall of Egypt. The water feature plays a different role in CFCM than in the Mall of Egypt or the Mall of Arabia where the water features are contemplative and aesthetic. The water feature in CFCM animates the open public space by the dancing fountain, the large expanse of water bodies, the waterfall, and the lighting of these water features with coloured lights.

(3) **The third type** of public space is the theatre or stage for accommodating performances and events. It follows the contemporary trend of eventifying places reinforcing the conceptualization of the city as festive. This type is identified in the District Mall and CFCM. The District Mall is an open-air mall that has a central outdoor...
stage located on an island in the artificial lake. The public space of the open-air mall is also surrounded by terraces of restaurants and cafés, but these terraces experience the movement of mall visitors as they circumambulate the artificial lake. The outdoor stage and the open space of the mall transform the mall into a bustling and large gathering space that almost totally dissociates the leisure experience from the shopping experience. The space is used for shows and live performances. In the case of CFCM, there is an open-air amphitheatre or arena where performances and events take place. It is also a place where a large screen is mounted for mall visitors to watch regional and international soccer matches.

(4) **The fourth type** of public space is the island in an open-air mall. This type is identified in the District Mall where the central public space is reached by bridges. The island type rhymes well with the pirate theme that is used in District Mall cued by the sunken ship in the artificial lake. In this type, the public space as stage is separated from the public space of the promenade circling the island and abutted with terraces and seating areas of restaurants. This gives separate experiences of the public space for visitors sitting / walking along the perimeter of the artificial lake or watching performances or sitting at the central café located on the island.

**Discussion**

The economic climate in Egypt is showing positive signs with political and financial support from Gulf countries and foreign direct investments. Seeing Egypt’s potential for growth, companies like Majid Al Futtaim are opening up the Egyptian market to new international retail brands and a new concept of the shopping mall that includes lifestyle, shopping tourism, entertainment, and outdoor public gathering spaces that complement indoor mall spaces. Other new concepts for the mall are adding active leisure experiences (the mall as a lifestyle club or community centre), dazzling sensorial experiences (the mall as a theme park) to engage visitors in other ways than shopping, adding pop-up exhibitions or pop-up markets and street festivals, and the use of technology in the form of innovative artificial intelligence platforms (the mall as a smart hub) or large multimedia display screens for advertisement and entertainment. The new mega malls in Egypt satisfy the needs of youth, women, and families at the physical comfort dimension, the social interaction dimension, and the cultural identity dimension (Abaza, 2001). In this sense, the new mega malls in Egypt are creating a ‘third space’ for such social groups where they are comfortable becoming ‘visible’, especially for youth and women. The mall becomes a special kind of ‘street’ setting (Matthews et al., 2000). The mall in itself represents a suitable, cheap outing, and convenient way to break the daily routine and be immersed in a different world (Farrag et al., 2010). We need to be reminded that the mall as a place of refuge and comfort is also a place that is, at the same time, reappropriated by visitors through their practices to satisfy their own purposes (Backes, 1997; Reyes, 2016). Some of the new malls in Egypt have demonstrated success of this new integrated model such as the CFCM that has plans for expansion as mentioned above, and the Mall of Arabia that has successfully opened its new expansion. The location of these new mega malls is strategic and is a factor in their success as they are located in the New Cairo and New Giza cities to cater to upscale residential neighbourhoods and gated communities while complementing other...
urban functions such as new universities, and research centres. A couple of the above malls, the District Mall and City Centre Almaza, are located close to the airport to cater to tourists on their way in or out of the country. The retail in the mall is diversified to cater to a wider spectrum of socioeconomic class by providing luxury retail, high range, and middle range as well as including a hypermarket to cater to a wider spectrum of needs rather than just clothing and shoes. So, at the overall scale of the mall, the mall may function as a “social mixer” (Beiró et al., 2018), but at the internal scale of the mall, the high-end expansions will tend to segregate customers depending on which areas within the mall they circulate in, the high-end or middle range. Such a segregation in circulation of customers within the mall has been observed by the researcher in malls in Canada that have added high-end extensions to the mall. A prime example is the Chinook Mall in Calgary, Canada. It is a completely enclosed mall with no open-air courtyards which makes it different from malls in Cairo, but the newly added high-end expansion of the mall segregates the internal circulation of users, dividing users to high income and middle income, or dividing user tastes between haute ‘couture’ and base ‘couture’. The localization / distribution of retail brands within the mall seems to play a role in social mixing / segregation of customers from different socio-economic levels.

It is noteworthy to point out that almost all of these newly constructed contemporary malls in Egypt are located in suburban areas without adequate access by means of public transportation. So, in a way, these malls promote some sort of exclusion of access to the average lower-middle class citizen. Nevertheless, despite their peripheral location, these mega malls have the potential for social mixing and inclusion by virtue of the presence of new public spaces for gathering and the sheer size of the mega malls that requires many visits to explore (Reilly, 1953). Many of these malls have become destinations for families and visitors on national holidays, weekends, and special occasions. The diversity of public gathering places, ranging from courtyards, parks, enclosed atria, and open plazas, gives many options for different social groups to aggregate and feel part of a larger social dynamic. As the research by Beiró et al. (2018) shows, the type of social mixing plays a role in mall selection and results in a socio-economic distribution of customers visiting each mall. One could extend their research results and make the claim that the type of public gathering spaces integrated within a mall plays a role in potentiality of a mall for social mixing. The more a public gathering space is open and accessible, the more the social mixing and inclusion. Vice versa, the more a public gathering space is enclosed and controlled (over-managed), the less the social mixing. This was evidenced in this paper when comparing the controlled courtyards in Mall of Arabia with the semi-enclosed plaza of the Mall of Egypt, the large plaza of CFCM or with the open-air District Mall. Having large open public places in the mall that allow social gathering and free appropriation of the space results in better inclusivity and social mixing. Further research is needed to corroborate such a claim. The trend in the design of malls to open up the enclosed form (and associated closed loop circulation) to include semi-enclosed and open public areas for social gathering may be a key in rescuing the North American model from the ‘death of the mall’ syndrome. Death of the mall syndrome refers to the closing of American malls after losing their main anchor stores that would attract users to a mall and generate pedestrian traffic.
The diversification in retail is paralleled with diversification in entertainment and leisure as well as diversification in food and beverage from restaurants for casual and fine dining to fast food, kiosks, and bars. The new mega malls are aiming to attract children, youth, adults, and seniors through the provision of passive and active leisure activities. The attraction of these social groups operates through an inclusive force, what Allen (2006) calls ‘ambient power’, that induces certain behaviours or stances. For instance, the Mall of Arabia is encouraging an active outdoor lifestyle through the inclusion of a playground, a park, a running track, and yoga platforms. The Mall of Egypt has brought the first snow park to Egypt for winter activities. It emulates the snow park in Dubai and could be considered as a form of ‘reverse tourism’ (Miles, 2012). These leisure activities are complemented with the clustering of restaurants around a public outdoor space such as the Mall of Egypt and the CFCM. The inclusion of a water feature becomes essential not only for aesthetic reasons and social function of the public space but also for physiological comfort as these new mega malls are built in a hot desert climate. However, mega malls differed in the form and scale of implementation of the water feature. For instance, CFCM has a dancing musical fountain and a waterfall, the Mall of Arabia has a smaller scale raised water feature that is contained within one of its courtyards while the open-air District Mall had an artificial lake. The outdoor public space in CFCM was also more accessible to the public than the Mall of Arabia as people felt more welcome to use the public space without subscribing to any of the restaurant terraces. Hosting outdoor events and concerts is now the norm for mega malls to attract visitors and give consumers a variegated experience of the mall rather than the monotony of strolling in the enclosed indoor commercial retail section. It is important for mega malls to consider better integration of indoor and outdoor spaces. For now, it seems the indoor spaces are for commercial retail functions while the outdoor spaces are for casual and fine dining or for leisure activities. The presence of such a divide may be one of the symptoms of the ambivalence of mall design between retail and leisure (Abaza, 2001). We have seen how the integration between the two was not so evident in the Mall of Arabia. Meanwhile, the design of Cleopatra Mall intends to do just that by means of the large canopy that unites indoors and outdoors.

In regard to the insertion of these mega malls in their immediate context, the mega malls generally turn their back to their surrounding context due to the solid blank façades of large department stores while favouring an internally oriented architecture. Accordingly, the mall is described by Tracy Davis as “a self-contained privately owned city”, or by Michael Sorkin as “a city without a place attached to it”, liberated from the historical past and cultural traditions (Backes, 1997). This separation from the immediate context is also demonstrated in the large swaths of parking (in the order of 4,000 to 6,500 parking spaces) that surround the mall. These mega malls are horizontally spread out on 2 to 4 levels in contrast to the vertical malls of the 1990s. The horizontal extension of the mall presents a problem of ease of mobility and the necessity of breaking the monotonous retail experience. To overcome that, malls are providing various services such as strollers for kids or wheelchairs for seniors as well as ways for parents to leave their children in a play area while they go shopping or exercising. To break the monotonous experience, one of the mega malls, the Mall of Egypt, designed different themes to three sections of the mall. Another feature the Mall of Egypt implemented to break the monotony is the use of innovative roofs and
skylights. Natural daylighting of the mall breaks the monotony of the archetypal sterile atmosphere of the enclosed mall and gives the mall a lively atmosphere. A couple of these mega malls obtained LEED Gold certification for innovation, energy efficiency, and water conservation. On this note, the Mall of Egypt deserves a tour dedicated to exploring innovations of roof design and natural daylighting. We also see in the Mall of Egypt the use of wood screens that mix the modern design of the mall with traditional Islamic architecture techniques for shading screens and light refraction through coloured glass panes. Of the six mega malls examined in this paper, those that are strategically located and integrated with the surrounding and complementary urban functions were the most successful. The shopping malls that particularly stand out are the Mall of Egypt, Cleopatra Mall, and the CFCM. Their strategic locations, successful integration within the wider urban context and ease of accessibility promote these shopping malls as substitute city centres for New Giza and New Cairo and as community centres for their surrounding residential districts. Nevertheless, the pseudo-public spaces created within these malls are driven and managed by private interests and corporate control that overshadow the dynamics of a truly public space of the traditional high street.

Conclusion
The transformation of the mall as a city within a city parallels changes in conceptualizing the city as marketplace to conceptualizing the city as a theatre and to the city as festival. The public spaces of the mall in this transformation do not solely serve the commercial function of the mall but provide the community with a public space for gathering, a public space for performances, and a public space for an active lifestyle while also reminding visitors that the public space is also for creating identities and reproducing social inequalities.

If the 1990s was the decade of malls in Egypt in the order of GLA 40,000 m², the second decade of the 2000s is the decade of mega malls for sizes in the range of GLA 100,000 to almost 200,000 m². The increase in size still leaves Egypt trailing a little behind recent mall construction in the Gulf Area such as The Avenues, Bahrain in 2017 with 273,000 m², The Doha Festival City, Qatar in 2017 with 244,000 m², and the Yas Mall in Abu Dhabi in 2014 with 235,000 m². The proliferation of mega malls in Egypt in such a short period speak to the scarcity of public spaces that are suitable for social gathering, social events, and lifestyle activities. An air-conditioned shopping mall is a welcomed place to be in, especially in cities that have hot summer weather and polluted air. The modern shopping mall is an environmentally controlled environment that offers comfort. It is also a welcomed place in cities that suffer from street chaos, traffic, parking, and safety issues. It is a place that offers a sense of order and cleanliness, designed as a destination through creating a sense of place, and a place of escape from the unpredictability of the public street. The shopping mall is a surveilled environment through the use of security cameras, and is a privately managed and controlled environment, a quasi-public space. The shopping mall is an extremely welcomed and needed place in cities in Egypt, especially within new cities constructed in an arid desert climate.

This paper identified a trend common in contemporary mega malls in Egypt, the transformation of the archetypal enclosed shopping mall, mainly focused on commercial retail function, to one that integrates public spaces for leisure, lifestyle, entertainment,
and dining. This may be a universal strategy to develop the conventional shopping mall concept and counteract the ‘death of malls’ syndrome prevalent in North America. Mega malls in Egypt are changing the conventional shopping experience from one that is based on a targeted and selective visit to particular stores to one that is based on spatial experience of the mall and social events that encourage recurring visits. The mall becomes a destination that is integral to one’s lifestyle and identity. To do that, mega malls in Egypt have resorted to integrating public gathering spaces in their design and associated landscape elements to diffuse the image of the mall from the single-bottom line of corporate profit to the triple-bottom line of environmental and social responsibility.

A general recommendation that this paper makes is that mega malls, along with the diversification of their function and aesthetic image, need to incorporate a variety of types of open public spaces for social gathering and social mixing to cater to different social groups, as well as allow the appropriation of these public gathering places by visitors. The use of landscape elements such as various water features, sculptures, benches, and shaded sitting areas would reinforce the successful functioning of the public gathering places. The challenge that remains for mega shopping malls is how to overcome the ambivalence created by juxtaposing the commercial, cultural, entertainment, and social functions. Will the commercial function of the mall remain the bellwether of those other functions? Stated differently, will mega malls be able to integrate ‘consumption in space’ with ‘consumption of space’ (Landman, 2016)? Is cultural diversity within malls being reinterpreted into a commodified version, an ‘aesthetic diversity’, to use Bauman’s term (Bauman, 2001)?

The four typologies introduced within the paper are not mutually exclusive. The enclosed courtyard type could be coupled with a large entry plaza while also having an island ‘promenade’ with a stage for music and festive performances. The typologies are introduced as corporate strategies to attract consumers and users to the mall. The overall strategy is to enlarge the appeal of the mall to a wider public by adding functions and uses that complement the major retail function of the mall. The configuration and degree of integration of different types of open public gathering spaces with the interior spaces of consumption and retail may well determine the difference between a well-integrated or polarized functioning of a mall. In either case, a strategic location of the mall within the city, its ease of accessibility, its inclusion within a larger network of complementary and compatible urban projects, and its integration within the larger urban fabric made possible by the mediating role afforded by open public gathering places remain decisive factors in the continued success of the shopping mall-turned-theme park-lifestyle activity centre building type.

At the urban level, these mega malls, by their sheer size and horizontal extension, act as magnets of activity and as prominent landmarks to their respective cities, contributing to the identity of these cities as places of festivity and lifestyle activity while at the same time offering a place for the reproduction and maintenance of identities. The insertion of large-scale plazas within the design of these mega malls changes the typical introverted character of mall design to an extroverted and welcoming environment. The openness and transparency of spaces invites users to appropriate and frequent the mall as a place of gathering and as a venue for exercising social presence and display. The insertion of courtyards and other types of open spaces allows for a better integration of the mall with the external natural environment, contributing to a diverse
spatial experience within the mall, rarefying the interior space of these mega malls by connecting them to the natural environment, alongside the ingenious use of skylights as aesthetic features. Nevertheless, such an integration with the wider urban context and immediate natural environment needs to be improved and articulated such that the remnants of the introverted typical shopping mall building type recedes in the background to give way to a fuller realization of a lifestyle activity and entertainment centre that caters to a wider public while at the same time contributing to a livelier urban scene. However, the large swaths of parking areas surrounding these malls still separate and detach mega malls from a fully successful integration with the surrounding urban context. Despite efforts to periodically interrupt parking areas with greenery or walkways, the sheer size of these parking areas positions the mall as an island surrounded by a sea of asphalt. These areas nevertheless may allow for future expansion or grey field development of mega malls, resulting in a much denser development and a more integrated one with the urban environment.

References


The Segregation in Access to Spaces for Urban Activities during COVID-19 Pandemic in Relation to Gated Communities in Egypt

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Abstract
Despite the long history of physical and social segregation by various types of gated communities in Egypt, they are attracting more residents. This is a result of the sense of privacy, security, access to proper services and the quality of green areas and public spaces that they offer. In most cases, such privileges and spaces for urban activities have restricted access to users who do not own residential units in such gated communities. With the current COVID-19 pandemic, starting in early 2020, and the Egyptian government's preventive measures, people's daily lives have been affected both economically and socially. Regulations such as the application of a curfew, and the closure of public services and facilities have had a considerable impact on population's urban activities and the use of the public spaces. Yet, it could be argued that urban activities within gated communities have increased as the residents were forced to stay at home, or within the gated compounds’ walls. Thus, this paper investigates the use of the spaces for urban activities inside the gated communities; whether residential or beach destinations, in Egypt during the pandemic. It then studies the segregation in the rights of use of open urban spaces inside and outside gated communities, during the pandemic.

Keywords: public spaces, COVID-19, gated communities, physical segregation, social segregation, segregation in urban activities

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Introduction
In early 2020, COVID-19 pandemic started to spread from China to all over the world, with increased cases in Egypt starting February 2020 (Gomaa, 2020). Similar to impacting the economy, the virus has impacted social interactions, as well as movements. Following the World Health Organizations’ recommendations of physical distancing and limited use of public spaces, Egypt started taking different measures to apply physical distancing across the country aiming to limit the number of cases during the earlier stages of the outbreak in Egypt. Such measures included strict regulations affecting the access to services, the hours of free movement and access to the beachfronts around the country. Consequently, impacting the use of the citizens to public spaces and their daily lives in general. The urban segregation in Cairo as a result of increasing the development of gated communities, has had a clear impact on the accessibility of the different social groups to urban activities. The segregation between the Upper class and low-class citizens is reflected physically through fences, gates and the limited access of ‘private public space’ or ‘privatized’ beachfronts within such gated communities. It could be argued that COVID-19 has resulted in magnified segregation as a result of the variation in the accessibility to spaces for urban activities and the variation of adherence to physical distancing measures inside gated communities compared to their surroundings.

Methodology
This paper aims to study and analyse the segregation in the residents’ access to spaces for urban activities in Egypt during COVID-19 pandemic. It studies the latter’s relation with the restrictions in accessibility of private public spaces in gated communities and the adherence of the private gated communities and their residents to governmental measures. First, desktop research on the concept of the Egyptian gated communities was conducted. In addition, Egyptian laws regarding the right of the public to use private ‘public’ spaces and privatized beachfronts inside gated communities were reviewed. Second, direct observations on the use of green spaces and beaches in gated communities were used to understand the gated community’s management and residents’ responses to the government’s measures, however this research has some limitation in the illustrations and photos as the paper was written post lockdown period. Furthermore, an online questionnaire was designed and shared on social media platforms, mostly targeting gated community residents, visitors and owners. With 57 responses, the questions aimed to understanding the people’s behaviours during the pandemic in the residential gated communities, mainly in Cairo, as well as sea fronted gated communities along the Mediterranean Sea and the Red Sea.

I. Gated Communities
I.1 Defining gated communities
Lukovich (1997) stated the classical definition of the gated community as a group of houses with an inner network of streets, surrounded by fences with closed gates. Such fences and gates reflect the search for safety and the aim to prevent, limit or address “crime, traffic, loss of sense of community, and fear of mixing” (Shouse and Silverman, 1999). So, such fences and gates create a segregation between what is inside and what is
outside, limiting the access of the public to the network of private properties that could include shared facilities and open spaces.

1.2 Gated communities in Egypt
In the late 20th century and the early 21st century, Egypt witnessed an increase of the gated communities in Cairo as a reflection of the rise of neoliberalism (Marafi, 2011). The former president Mubarak’s government aimed to decentralize the city of Cairo, with strategies to use huge suburban communities to attract the elite from the crowded city centre to luxurious suburban communities. Policies regarding the use of desert land aimed to attract Egyptian and foreign private investors to invest in the real estate sector in Egypt (Marafi, 2011). However, the gated communities created physical and social segregation and have increased the gap between social classes (Murphy, 2010). Since 1994, the number of these gated communities has significantly increased, and the number of deluxe residential units have exceeded the market’s capacities (Denis, 2006). Gated compounds in the extensions of the main urban cities such as Cairo, aim to attract permanent residents who would use their rented or owned units for the whole year. Such compounds are considered part of the New Urban Communities projects. On the other hand, gated compounds as part of touristic development projects could be considered temporary destinations and are usually sea fronted. Examples include gated compounds in Ain Sokhna by the Red Sea or the North Coast by the Mediterranean Sea, which provide private beach access for their owners. There is also a mixed type, such as the case of El Gouna by the Red Sea that combine between users who live and others who are temporary users.

1.3 Public space and public private space
Public spaces could be defined as “inclusive spaces that all people are free to use without consent or justification, thus exercising their citizenship rights” (Attia, 2011). Regardless of their typology, for instance whether they are green or not, they have a strong role on the wellbeing of the social and psychological wellbeing of citizens. However, similar to other developing countries, access to public spaces has been a rising concern in Egypt (Attia, 2011). In fact, new forms of privatized public spaces have evolved with the increase in gated communities. Private public spaces could be defined as shared inclusive spaces for residents of a certain gated community being within the fences of the latter. Whereas based on the limitations of access to the gated community, the access to such private public spaces is limited or not to the general public.

1.4 Gated Communities’ attractiveness to residents
The number of residents that attracted to gated communities increased due to the promise of a better quality of life. It is represented in the well maintained and managed facilities and services including infrastructure, schools, sports clubs, in addition to the access to open public spaces as well as the extensive green and pedestrian areas. According to the conducted online questionnaire, 70% of the residents of gated communities responded that they chose to live there to access quality public spaces and green areas and 60% responded that the decreased pollution in gated communities is a key factor. 54% of the respondents also chose access to proper services and 40.5%: having better status. Furthermore, 65% and 51% responded that they chose to live in
gated communities for their sense of privacy and sense of safety, respectively. This could be analysed to be a result of having gates and fences separating the residents from ‘outsiders’ as well as additional security measures that vary between different gated communities from security checkpoints to using cameras and advanced data centres to monitor movement.

1.5 Legal Classification of gated communities in Egypt
According to the law, based on the purpose of the project whether to develop new urban communities or touristic development projects, the plots are allocated to managing governmental agencies that have the right to manage, exploit or transact the allocated land following their defined purpose. First, for touristic development projects the TDA, The Tourism Development Authority, is considered the managing agency with full ownership rights in coordination with the Ministry of Defense. For new urban communities NUCA, New Urban Communities Authority, is the agency in charge. Each authority operates using a separate budget from other governmental bodies and has the right to transform such private state property to become private property through allocation or transaction to investors.

1.6 The rights of access in gated communities
Gated communities vary in how they permit different users to access their facilities. Semi-gated communities such as El Rehab and Madinaty allow non-residents as well as ‘random’ visitors to enter and use their facilities including commercial zones, private services and some of the spaces for urban activities such as open green areas. Completely ‘private’ gated communities in Greater Cairo include Qatamiya Heights, Beverly Hills, Palm Hills and Dreamland (Denis, 2006) and sea front compounds include Marassi or Hacienda in the North Coast. The right of access of the users is segmented in those compounds based on ownership status of units as only residents with owner cards and limited pre-authorized visitors are permitted in (Ellakany, 2020). This limits the access of non-residents to spaces for urban activities, whether green spaces or beachfronts.
Legally, it is hard to identify the right of access of citizens in residential gated communities that are considered part of new urban development communities. This is due to the conditions of allocation of the land plots by NUCA to investors that move the responsibility of infrastructure provision to private investors and developers. For instance, the investors or developers of such gated communities are responsible to build the internal road networks, green spaces and pedestrian areas. The costs of the latter are covered by the higher price per meter and the service fees paid by the individual units’ owners. This could be viewed as a change of public ownership of the roads to a shared ownership of the residents, managed by the gated communities’ developers.
Yet, in the case of touristic developments by the beachfront, the violation to public rights is clearer. Procedures of touristic development projects follow the Prime Minister’s decree no. 2908 for the year 1995, following law no. 7 for the year 1991. The TDA has the right to develop the land by itself or through investors who could buy or rent or Usufruct the land plots, with a limitation of 25 years in the case of rent or

1 Nassrat, S. (2020): a resident in gated community, an interview conducted by Ellakany.
Usufruct (Egyptian Gazette: Prime Minister’s decree no. 2908 Sections 2-4, 1995).
Regardless of the scale of the development project, it is clear in section 8 and section 4 that the land plot sizes are defined and calculated excluding the beachfronts (Official Gazette, 1995). This means that the compounds and resorts along the sea are not permitted to hinder any citizen from using the beachfront attached, except for the facilities built by the compound or the resort (Shorouk, 2019). In fact, beachfronts are considered a public property and according to the Civil Code section 919 (Egyptian Gazette, 1948), the land of the sea is a public state property that cannot be exploited. Furthermore, section 1023 of the Civil Code (Egyptian Gazette, 1948) states that the owner of the land does not have the right to create any obstacles to hinder the benefit of its neighbouring owner. Thus citizens should have the right to access such beaches, and the right of passage through the gated communities if it this is the only path to access the beach.

2. Access to Spaces for Urban Activities during the COVID-19 pandemic
According to direct observations and the conducted online survey, there was a clear segregation in both the application and the adherence to the Egyptian state’s COVID-19 preventive measures. This created a variance in accessibility of spaces for urban activities between higher and lower income residents: residents who own units in gated communities and outsiders.

2.1 The Egyptian measures towards the COVID-19 pandemic
Although the first case of COVID-19 carrier in Egypt was discovered on 14th February 2020 (Gomaa, 2020). The government started to take actions on 10th March by cancelling all the events which gather people on a large scale such as musical parties, exhibitions...etc. Moreover, it announced further measures, on the 24th of March, including a curfew from 7:00pm to 6:00am, the closure of the shops from 5:00pm and their closure during weekends, except for supermarkets and pharmacies (Prime Minister, 2020). Furthermore, the government issued the decision to close all the sports clubs and the gymnasium centres, the restaurants and the cafes with delivery permittivity.
In addition, due to the photos and videos shared on social media of the crowded beaches, on 28th of March, the local development ministry announced the closure of all the beaches in all the governorates (Cairo Scene, 2020) (El Fasla, 2020) which meant that all citizens were not allowed to sit by the beaches or swim in them. This decision included public beaches such as in Ras El Bar and Alexandria (Egypt Independent, 2020) (Ahram Online, 2020) and private beaches, for example, in Ain Sokhna’s gated compounds where owners escaped the city as work and schools became online (Ellakany, 2020). However, the decision of closing private and public beaches was confirmed by the announced decree on 5th April to close all the beaches as well as public parks (Cairo Scene, 2020) (El Fasla, 2020). This aimed to limit all urban activities in both public and private urban spaces and across all governorates.
Furthermore, governmental regulations differed during national vacations. During the Easter vacation on 15th April, the government confirmed the closure of all beaches, in addition to the closure of all parks and the pedestrians’ use of the Nile corniche. While during Ramadan, the curfew hours were changed to be from 9:00pm to 6:00am (Official
Moreover, during Eid vacation from 24 to 29th May, the governmental decision announced the closure of all the shops, beaches, public transportation means and the Nile corniche and the curfew hours were changed to start from 5:00pm (The North Africa Journal, May 2020). After El Eid, starting from June, the government announced that it is obligatory to wear masks in the public spaces, markets, banks and public transportation means, with a fine of 4000 EGP for those who do not adhere to this regulation (Farhat, 2020). Despite the increasing number of the COVID-19 cases in Egypt, the Prime Minister announced that from 26th June, most of the restrictions were lifted and the government moved to coexist with the pandemic. As restaurants, cafés, sports clubs, and cultural facilities such as cinemas and theatres were allowed to be reopened with 25% of their capacity. The decision extended the working hours of the shops and restaurants and the cafes till 9:00 and 10:00pm and public transportation means were allowed to work till midnight. Yet, the closure of the public beaches and parks were extended to avoid the expected crowds. On the other hand, private beaches were allowed to be re-opened which continues to be the case (Egyptian Streets, 2020). Hence, this reflects a segregation in the application of the governmental measures between private gated communities and their surroundings; permitting higher income citizens to enjoy open private urban spaces whether green spaces or beachfronts while prohibiting lower income residents from accessing their public counterparts.

2.2 The Gated communities’ residents use of spaces for urban activities during COVID-19 lockdown

Unified measures to prohibit access to spaces for urban activities, were not enforced on ‘private’ urban spaces inside gated communities. Hence, during the curfew, it was observed that in most of the gated compounds, the residents were permitted to walk, cycle and run within the gated compounds with no curfew in place and even some shops were open after curfew hours with limited access to the residents (Ellakany, 2020). Additionally, based on the online questionnaire, the majority of the respondents, around 60.5%, did not adhere to the curfew hours inside the gated community. Around 58% of the respondents mentioned that their use of spaces for urban activities increased than before COVID-19, while 21% of the respondents stated that it was the same as before the pandemic and 21% stated that their use of open spaces decreased during the COVID-19 lockdown. In addition, walking was the main activity done in the open spaces during the pandemic according to 74% of the respondents, whereas the answers indicate that other activities included meeting their friends and family as selected by 45.5% of the respondents and cycling as selected by 26.3%. While running and picnic were activities done by 22.8% and 17.5% of the respondents respectively. As El Eid, which is the Muslims’ Feast, is one of the key vacations in Egypt for the citizens to celebrate in open spaces or by the sea, the variance in social interaction patterns and the adherence to governmental measures were clearly observed. Even before El Eid, roads leading to the Nile Corniche in Cairo, the ‘free’ pedestrian path along the Nile, were blocked in some areas, as observed in Zamalek, abiding by the measures applied in April and May. Similarly parks and all public recreational facilities were closed and the curfew starting 5:00pm was strongly adhered to. In terms of access to the beach, other than having no public beaches open and the roads closed during curfew hours, the limited public transport hindered any citizens who are not car
owners to travel to the beachside and view it even from a distance. This formed another layer of segregation between citizens who could afford owning cars and who could not.

On the other hand, the application of curfew hours varied in the different sea fronted gated communities. On one hand, the curfew was applied and monitored by the police within gated compounds in the North Coast\(^2\), but on the other, measures were not applied in most compounds in Ain El Sokhna. Even moving between the different Ain El Sokhna compounds, along the main road, connecting Cairo and the city of Hurghada, after curfew hours was possible with no monitoring and there was lack of adherence to preventive measures within the gated communities (Ellakany, 2020). Moreover, the responses of the online questionnaire confirms that the majority, around 57.7% of the respondents, did not adhere to the curfew hours inside the gated sea fronted gated compounds, however in terms of abiding to the curfew outside the gated communities, the percentage was less as only 38.5% did not adhere to the curfew.

![Figure 1. People swimming and sitting at the beach from a distance. Taken in Marina El Alamein gated compound in the North Coast on the 12 of June, before opening private beaches (Author 2020)](image)

In addition, based on the online questionnaire, around 44.6% of the respondents (26 of 65) went to the sea fronted gated communities such as the North Coast, Marsa Allam, El Gouna and Ain El Sokhna during the lockdown. The majority of them around 65.5% of the respondents entered the gate as owners while the others entered as visitors or renters. Their duration of stay varied from one day to a month or more but the majority, around 54%, stayed there for a few days. Their reasons to stay during the lockdown were various, including staying with friends and family, enjoying the open spaces for urban activities or for health and safety reasons: avoiding crowded spaces.

\(^2\) Khairy, R. (2020): a resident in gated community. An interview conducted by Ellakany
Figures 2 and 3. People fishing and sitting at the beach from a distance.
Taken in Piacera gated compound in Ain El Sokhna during Eid Vacation

Khalil, N. (2020): a resident in gated community. An interview conducted by Ellakany
However, the main reason for 84.6% of the respondents was to enjoy private beaches that were open during the lockdown. Although, announced governmental measures emphasized that all private and public beaches were to remain closed, some sea fronted gated compounds residents and their authorized visitors, friends and family of the residents, were able to access and use the beach whether by sitting, walking swimming or fishing, as shown in figure 1, 2, 3.

This was even confirmed through the online questionnaire, as around 92% and 88% of the respondents respectively mentioned in the questionnaire that their main activities in sea fronted gated communities were swimming or sitting in front of the sea. In addition to other activities: walking, meeting friends, running, picnic and cycling.

Conclusion
The purpose of gated communities in Egypt is the development of new urban settlements and tourism development projects as well as attracting private investors for economic development. However, it is evident that they have caused different layers of urban segregation. This applies to all gated compounds whether they are located in extensions to major urban cities such as Cairo or along the coasts of the Mediterranean or Red Sea and whether they are used by their owners permanently or temporarily.

This urban segregation is physically visible through the use of fences and gates that create a physical barrier to deliver a sense of safety and sense of security; a key promise for residential unit owners in those compounds. The sense of security in addition to accessing quality ‘privatized’ urban spaces could be considered main attractions for people choose living in gated communities.

The gated communities’ right to build physical barriers creates layers of social segregation between ‘insiders’ and ‘outsiders’ whether in terms of access to facilities or the adherence of governing measures and laws. The gates and fences of some gated communities limit the access of the public citizens to ‘privatized’ facilities and services including green spaces and pedestrian areas. Yet, it is hard to distinguish whether public citizens should have the right to access the internal networks of open spaces of such gated compounds as they are privately developed with minimal to no support from the government. Similarly, sea fronted gated communities limit the access of the citizens to sea fronts. In this case, as sea land is considered public state property, hindering the access of the citizens is considered a violation of public rights.

This segregation between has magnified the social segregation during COVID-19 lockdown measures. Despite the government taking inclusive measures that cover all citizens at the start of the COVID 19 lockdown to control the outbreak, there was a variation in the adherence of the gated communities to the COVID-19 state measures from their surroundings. Although the government’s measures limited free movement through having a curfew and prohibiting access to public spaces, gated communities as private property were not subject to monitoring by the state. This resulted in lack of adherence of the government measures within gated compounds, creating a larger degree of variance of access to spaces for urban activities between gated community residents and non-residents. Non-residents had no access to any recreational or open spaces for walking, cycling, running, social interactions and swimming, while based on observation and the online questionnaire, residents and their permitted visitors have shown an increase in the use of public space for urban activities. This was due to
residents staying at ‘home’ which included their residential units and the in-between spaces within the gated compound’s walls. This social segregation was even magnified directly by the state through the differentiation in the measures applied to ‘privatized’ beaches that are currently open and public beaches that remain closed. The paradox being that the restricted access of non-owners to private beaches is considered primarily a violation of citizen rights.

This reflects how gated compounds are treated by the state as isolated zones. This is initially enforced by the allocation of land plots to governmental agencies, NUCA, TDA, with separate budgets and full authority through the right to manage, exploit or transact the allocated land. It is also enforced by the lack of clarity in the laws in terms of citizens’ right to pass or not and the lack of adherence to fines related to the violation of the sea fronted gated compounds in allowing citizens’ access to public state property: beach areas. Another reason is the differentiation in the application of the regulations and policies on ‘private’ spaces for urban activities and public spaces for urban activities. Finally, the lack of monitoring and controlling by the state to the abidance to policies and regulations inside gated compounds.

As the COVID 19 pandemic was a unique sudden case for both the gated compounds and the state, there are key learnings. First, measures that prohibit access of citizens to spaces for urban activities could be less strict in terms of complete prohibition but remain limiting in terms of number of citizens to ensure safety of citizens. Second, for existing gated communities that have had owners paying higher rates in return for quality private services, there should be clear distinction of the rights of owners versus non-owners on the level of the state where measures should be similarly applied to all citizens regardless of their income and related privileges. Third, for land plots under development as gated communities, semi-gated compounds such as the model of Al Rehab or Madinaty that balance between private properties and networks of private open spaces and services accessible to the public could offer a better option and should be enforced through the state agreements with investors and developers. Optimally, desert land developed should have new alternative models rather than the development of gated communities. Because gates and fences would always form a certain form of segregation regardless of type. Yet, further research needs to be conducted to find alternative models that would ensure the access to quality-maintained spaces for urban activities even when made more accessible to the public.

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COVID-19 Pandemic: Between Public Space and Users’ Behaviours. 
Case studies from Egypt, Jordan, and Germany

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Abstract
The current COVID-19 pandemic, which started in China in early 2020 and rapidly spread all over the world, has a considerable impact on people’s daily lives in all its aspects, be it economic, social, and built environment. Countries have implemented different actions and set out various regulations to limit and slow down the outbreak of COVID-19. These governmental regulations ranged between semi and full lockdown as well as a curfew was implemented depending on various factors; such as time and the severity of the situation. People have responded differently to those regulations depending on the measures themselves, and their culture. Nonetheless, those governmental regulations have undoubtedly affected public life and public space, residents started reclaiming their public spaces, and they have realized its importance. Some governments responded to their citizens’ behaviour, which led to a better public life in the spaces, while in other cases residents have shown a level of awareness and belonging towards public space that encouraged them to initiate movements and campaigns to reclaim their space. This comparative analysis study investigates those different cases in New Cairo, Mansoura, and Hurghada in Egypt, Amman in Jordan, and Berlin in Germany and highlights the relation between the governments’ regulations regarding public space and citizens’ behaviour in light of the COVID-19 pandemic. It shows the importance of understanding the behaviours of the citizens by governments to respond accordingly.

Keywords: COVID-19, reclaiming public space, users’ behaviours, governments’ regulations
Introduction
In early 2020, the world witnessed the spread and growth of the COVID-19 virus caseload, which will remain an unforgettable tragedy for the whole world that got affected severely on all levels. The World Health Organization (WHO) declared the COVID-19 outbreak as a pandemic on 11 March 2020, after it had been identified on 7 January 2020 in China (WHO, 2020). Countries and governments all over the world have been taking actions and regulations towards working against disseminating the virus, as the healthcare systems in countries where the pandemic was widespread were facing heavy burdens. Some of the most common measures and regulations governments adopted were restrictions on travel and transportation; which included shutting down the borders, airports, setting up strict restrictions for public transportation. Regulations also included introducing curfews to reduce mass mobility; policies regarding curfews varied depending on the severity of the situation and the government’s vision. Measures concerning work-life were implemented, home-office has been introduced in many countries around the world, and people have lost their jobs, while others faced a reduction in their working hours as well as salaries. Different regulations were introduced as well in public spaces and public transportation; social and physical distancing when being in public spaces, as well as wearing masks and gloves (Aytekin, 2020). While all those measures were crucial to restrict the spread of the virus, they have shut down daily life in all its social and economic aspects. Experts in different fields have been observing those changes caused by the outbreak of COVID-19 as well as the measures and regulations set out by the governments. They have been studying and coming up with new strategies to be able to overcome those social, spatial, and economic challenges. This paper focuses on the measures set by governments concerning public spaces, and the effect of those measures on the behaviour of the dwellers. It attempts to contribute to building a better understanding of the patterns of interactions between the citizens, their use of public space, and the governmental regulations in facing the pandemic. Five case studies have been taken from three countries; New Cairo, Mansoura, Hurghada in Egypt, Amman in Jordan, and Berlin in Germany. Therefore, different measures and regulations are reviewed, as well as their effect on people and the way they responded and reclaimed their public space.

Research Question: how governments’ regulations could be perceived through the use of public space in different contexts?
This paper focuses on the relationship between governments’ regulations regarding public space during COVID-19, the citizens’ responses to those measures, and the different behaviours in reclaiming public space. Therefore, this paper attempts to answer the following questions:
1. How have citizens responded to the regulations regarding public space set by their governments during the COVID-19 pandemic?
2. How did those responses and regulations play a role for the citizens in reclaiming their public spaces?
Research Methodology
To answer the research questions, this paper analyses five case studies comparatively during the time of COVID-19. The case studies are New Cairo, Mansoura, Hurghada in Egypt, Amman in Jordan, and Berlin in Germany. The two MENA countries, Egypt and Jordan were chosen due to their similar neoliberal urbanism, urban challenges, in addition to their similar cultural background. That makes them interesting for comparative analysis. While Berlin’s addition as a reference reflects an innovative comparative approach (Robinson, 2015) case and a good comparative example of how city management can support respecting the general rules during the pandemic. Nonetheless, the case of Berlin focused on an area where a good number of its residents are Arabs or of Arab origins, making the cultural aspect closer to the other case studies (Ayed, 2012).

A specific unified analysis has been created and followed through the research for all the cases to ensure a clear structure for the analysis and comparative analysis of the findings. This included documenting the events in a descriptive timely manner; documenting the outbreak and spread of the virus, the governmental response and measures implemented, and the citizens’ socio-spatial behaviour. Three different case studies represent the Egyptian case, as each city varies in the severity of the COVID-19 situation, built environment characteristics, and demographic aspects, those aspects heavily affect the behaviour of the dwellers in reclaiming their public space. For tracing the measures taken by each government, the study relies on secondary sources (i.e., websites, official declarations, and local newspapers). To measure the citizens’ responses and behaviours in reclaiming the public spaces in the studied cities -in the form of primary data- an online questionnaire was designed and shared during June and July 2020 on different social media platforms, containing a mixture of open and close-ended questions. The questionnaires aimed to provide a representative sample from each studied city. It included both males and females, the majority of the sample ranging in age from 18 years old to 65. It also included a wide range of different social and geographical backgrounds. Each city had a different number of respondents; 89 from New Cairo, 174 from Mansoura, 46 from Hurghada, 70 from Amman, and 115 from Berlin. Informal areas settlers were not targeted in the studied cities as the investigated public spaces belong to the formal parts of the studied cities. Furthermore, the authors observed and documented the residents’ spatial and social behaviours and activities in specific public spaces. Although observations are about the users with no specification of their type (age, gender), children were included as spaces’ users and included as part of the families. Detailed field notes, and visual documentation, which included photographs and drawings, were of high value to this paper. The discussion of findings then presents the comparative analysis, leading to the conclusion and recommendations.

COVID-19 Pandemic and Public Space: Literature review
The research first explores the definitions that link the urban environment to the pandemic. According to UNESCO (2020), a public space refers to an area or place that is open and accessible to all people, regardless of gender, race, ethnicity, age, or socio-economic level. Besides, the charter of public spaces (2015) defines the public space as “all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive. Each public space has its own spatial, historic, environmental,
social and economic features”. We considered public gathering spaces such as plazas, squares, and parks. In this context, connecting spaces such as sidewalks and streets, are also considered as public spaces. Public open space has been defined by Jacobs (1961) as outdoor spaces with free access for people such as cafes, retail, bazaar, parks, streets, and pedestrian paths. A collaborative framework (Innes & Booher, 2000) in designing public spaces is a reason for their success. Thus, public open public space is successful while it becomes a conducive place for social interaction and attracts many visitors to do their activities (Danisworo, 1989; Whyte, 1985), with a wide range of activities occurring individually or in a group (Gehl, 1987, 2010).

In the context of this study, the public space becomes even more important to be studied concerning the citizens’ behaviours to contribute to controlling the pandemic. Economic activities (including informal activities) take place in public spaces, as it is the main venue for urban life (Gehl, 2007). Governments have taken certain measures as a reaction to the world pandemic, known as COVID-19, according to the WHO (2020). This varies between curfews and complete lockdown in some countries, and more relaxed regulations in others. People’s response regarding following those regulations also varies, which was received by the governments and local authorities either strictly or was simply ignored. Generalizing while talking about a whole country is not possible, as even within the same city some areas are strongly controlled, while other areas are not controlled regarding people’s behaviours in public space (Hamzah et al., 2020).

As for the urban regulations and pandemics’ history between 1918 and 1919, the Spanish flu killed millions of people worldwide, it was estimated by 50 million and the urban areas had the higher mortality rates (Johnson and Mueller, 2002). The influenza vaccine would not be developed until 1945, however, the main prevention of the influenza outbreak was the quarantine (Nelson and Williams, 2001). The strategies to reduce the spread of the virus and transmission were based on reducing points of contact among infected and non-affected people through different policies like closing theatres, schools, churches, and as well as preventing large gatherings. These restrictions when implemented early lowered the peak of mortality with cumulative mortality. Also, the duration of this restriction affected; the epidemic returned with a rebound in mortality as when the restrictions relaxed (Hatchett et al., 2007).

The research methodology relies on comparative urbanism as an approach while designing the research and preparing its discussion of findings. Jan Nijman defines comparative urbanism as “The systematic study of similarity and difference among cities or urban processes.” (Nijman, 2007). Comparing MENA cities with arguably similar backgrounds with a European case represented in Germany’s Berlin (NeukoLN, Arabs district) tests the impact of COVID-19 on public spaces throughout different urban setups (McFarlane & Robinson, 2012) and relying on the commonalities in the Arab culture (Ayed et al., 2012, Wari, 2017). This shows how culture can play a role in the users’ behaviour and attitude towards public space. This differentiation does not only portray regional differences, but it also applies to the MENA cities themselves, given the different pandemic severity and corresponding actions by governments and citizens.

1 In this research’s context, culture is considered the complex group of norms and values that controls behaviours, based on Clifford Gertz’s definition “a set of control mechanisms for the governing of behaviour.” (Geertz, 1973, p.14). Peterson (2004) defines culture as “the relatively stable set of inner values and beliefs generally held by groups of people, in countries or regions and the noticeable impact those values and beliefs have on the people’s outward behaviours and environment” (Peterson, 2004, p. 17).
Case Studies

1. Egypt

Egypt has the biggest population in the Arab region, ca. 100 million, with the highest density in the inhabited area, mainly in the Nile valley. The first case of COVID-19 discovered in Egypt was on 14 February 2020 (Gomaa, 2020), and since then Egypt has developed different restrictions to cope with the virus along three different stages. The first stage of measurements took place on 14 March; President Abdel Fattah El-Sisi issued the decision to suspend all schools and universities for two weeks to combat the spread of the virus (Egypt today, 2020). On 24 March, Prime Minister Mostafa Madbouly announced further decisions aiming to combat the spread of COVID-19 (Prime Minister, 2020). The measures were implemented with immediate effect and last until the 15th of April. These measures include the closing of Cairo International Airport, the closing of the sports clubs and the gymnasium centres, a curfew from 7:00pm until 6:00am, the suspension of all government services except for health facilities, restricted business hours during weekdays (until 1:00pm for banks, and until 5:00pm for shops and restaurants), and closure during weekends except for supermarkets and pharmacies. During this period, the government continued to apply disinfection and sterilization works on many institutions, ministries, and infrastructure facilities such as the metro, ministries offices, and departments (Hameda, 2020).

By mid-April, Egypt confirmed 2,700 cases, a week later cases had grown by more than a third. While the outbreak is just beginning, Egypt’s fragile health care system is already struggling (Raghavan, 2020). The government set up further regulations during the occasions and the special vacations to control and limit the outdoor gatherings. For example, during the Coptic Easter vacation on 15 April, the government set up regulations to close all the beaches, the parks, and the Nile corniche. Moreover, during Ramadan which started on 24 April, the government decreased the curfew hours to be only from 9:00pm to 6:00am while the mosques were still closed. And during the Eid from 24 to 29 May, the government set up strict regulations to close all the shops, beaches, public transportation means, and the Nile corniche and it increased the curfew hours to start from 5:00pm (Garda World, 2020). On 23 June, the Prime Minister announced the lift of most of the restrictions and moved to coexist with the virus (Egyptian Streets, 2020a). As a result, restaurants, cafés, sports clubs, and cultural facilities such as cinemas and theatres will be allowed to reopen but are required to operate at 25% off their capacity, according to Madbouly’s statement. As per the new regulations, the opening hours were extended until 10:00pm instead of 4:00pm, and people are free to move and go out without any curfew hours (Egyptian Streets, 2020b).

1.1 New Cairo, Egypt

New Cairo city is one of the biggest new urban communities that has been officially established as a city through a presidential decree in 2000, as a response to accommodate the overpopulation in Egypt. It is located on the eastern side of greater Cairo, and adjacent to the ring road. It occupies an area of about 500 km² with low density in general, according to New Urban Communities Authority (NUCA), its population is around three million people. New Cairo consists of five planned settlement sections which are the Fifth Settlement, the First Settlement, the third and the eastern side, as well as the southern side with 330 new gated communities. The
three settlements contain social housing, gated communities, and private housing (NUCA, 2020). Generally, residents lack any public green parks and usually depend on private club sports or malls for recreational time, which was heavily noticed during the pandemic and the curfew hours. Public Social housing (distinguished housing-Al Motamayez) in the Third Settlement is the focus area for observations; it represents a housing model designated for the middle-upper middle class adopted by the government and replicated all over the country. Respondents of the questionnaire were residents of different New Cairo city areas. The unclear borders between the third and the fifth settlements made the responses from both be considered together as one category. As a result of the restrictions of COVID-19 and national regulations of working hours and physical distancing limitations, around 65% of the participants got affected either by working from home full-time or on a part-time basis. Before the pandemic, 76% of the participants used private cars for transportation, while 12.5% depended on public transportation and 2.5% used Uber or Careem. whereas during the pandemic, private car usage decreased to 63.7%, and dependency on public transportation decreased to 2.5% and the dependency on private services like Uber or Careem remained the same on an of average 2.5%. The reasons for going out during pandemic time were prioritized. On top, around 71% listed going out for grocery shopping, while going out for work was listed as a second priority by around 41%, then 29.5% went out for walking or running. The weekly frequency for going out to work during the pandemic time was also an indicator to know to what extent people went out. Around 40% (the majority) answered they worked from home, while 23.8% went out once or twice a week. 18% answered they went out to work three to four times per week. The answers revealed that the majority respected restrictions and regulations during the pandemic time and followed restrictions over social distancing. 62% never go out to visit nor meet friends or family members.

Figure 1. The Third Settlement in New Cairo during the pandemic (source: Khairy, 14 April 2020).
The usage of public space in New Cairo city was limited by choice, before the pandemic, the study showed that private clubs were the first choice with 67% and malls counted as the second choice with 52.5%, while open green spaces were ranked in third place by 27%. While further answers were to go out during the pandemic indicated the increasing demand of residents to use streets as public spaces by 63% as the following chart illustrates.

![Residents' usage of public space during the pandemic](source: Khairy, July 2020)

Besides, during the pandemic, answers indicated their need to go for a walk in the nearby public spaces by 74%, cycling 18%, and running is 9%. While there has been a night-time curfew imposed on 24 March, residents in the settlement broke the curfew hours especially during Ramadan² to go for walks, cycle, and walk their pets (as shown in figure 3).

![Residents from third settlement breaking the curfew during Ramadan](source: Khairy, 24 May 2020)

² Curfew hours during Ramadan (23rd April to May 23rd, Mosques were closed completely which is marked one of the main features during the holy month for the Muslims.
With the time prolonged of curfew and lockdown, residents started to reclaim their public spaces more. They started creating safe spaces for children to play; families started to appropriate spaces in between buildings to make them child-friendly. They used recycled materials such as car tires to create playgrounds. Those spaces acted as family gathering spots as well; this is shown in figure 4. One of the participants expressed “I want to take my kids out to an open space where they can run and enjoy” (female, 30s).

The questionnaire also surveyed the future reactions of residents after the lockdown ends by highlighting the need for going out to public green spaces. The answers revealed that 48% will use sports clubs while 40.5% will continue using the streets as their public...
spaces for walking. It can be realized that residents long for open public space, as one of them expressed; “once this is over, I want to go out to a big open space full of greenery, or a public park” (female, 30s).

Figure 6. Public space and physical activity chart in the case of the reopening of the gym and the sports clubs (source: Khairy, July 2020).

Negative attitudes were observed during pandemic times as well, people started to throw the used masks and gloves in the streets and public spaces, as shown in figure 7. This indicates the immense need to raise awareness towards public space.

Figure 7. waste of masks and gloves in the third settlement area, new Cairo (source: Khairy, 14 June 2020).

1.2 Mansoura, Dakahlia governorate, Egypt
Mansoura city which was established in 1219 AC is located in the Nile Delta in Egypt and lies on the eastern side of the Damietta branch of the Nile. It is the capital of the Dakahlia governorate and is administratively divided into two districts: the eastern and the western districts (Dakahlia Governorate Website, 2020). The city area is about 28.2
km², with a population of 594,721 people according to the population census in 2019 (city population, 2020).

The observations in this case study focused on the Nile corniche and its extension of El Mashaya street which represents the main street in Mansoura, in addition to Kafr El Batamas street market, as an example of vital public space and the largest street market in the city.

Figure 8. The crowd in El Mashaya Street (Source: Aziz, 7 April 2020).

Figure 9. The crowded Kafr El Batamas street market before the curfew hours (source: Aziz, 30 April 2020)
Despite the governmental regulations and campaigns that encouraged the people to stay at their homes and only go out for essentials to avoid the outbreak of the COVID-19 pandemic, the streets were relatively crowded in Mansoura city. Based on the questionnaire, the pandemic also affected their choice of shopping destinations, as the number of participants who preferred to go to the street markets for shopping decreased from 19% to 13%. While the number of people who preferred supermarkets significantly decreased from 87% to 54%. This shows that the people managed to replace using supermarkets with delivery service, meanwhile the street markets had no alternative in their point of view. Figure 9 shows the street market in Kafr El Batamas full of people.

Due to governmental regulations regarding the closure of sports clubs and gyms, 54% of the participants of the questionnaire took on walking in public spaces as the main physical activity. When asked about the most used public spaces; the participants clarified that the Nile corniche and El-Mashaya Street were their preferred options, which was confirmed through the observations. People -families, men, and women- from different age groups and social classes walked and ran, either during the early hours of the day or just before Iftar time in Ramadan, as shown in figure 10. Moreover, organized groups of women started to exercise in El Mashaya Street in the early morning as shown in figure 11. Women started using and reclaiming public space in ways and methods that had not existed before the pandemic.

There were other observed activities along the Nile such as flying kites, as shown in figure 12.

Figure 10. Using the Nile corniche as a track for walking and running before Iftar in Ramadan (source: Aziz, 15 May 2020).
Figure 11. Doing exercises in the streets and public spaces in the early morning (source: El Yom El Sabeaa, 9 July 2020).

Figure 12. The activities along the Nile corniche before Iftar such as fishing and kite flying (source: Aziz, May 2020).
Although the pandemic affected the quality of using the public space and introduced new activities to take place there, it also decreased the rate of using the public spaces as 77% of the participants mentioned. On the other hand, 15% declared that their use of public spaces increased during the pandemic. The chart below illustrates the participants’ preference for physical activities in case of reopening gyms and sports clubs, and that shows a change in the culture of using public space in Mansoura; more than 50% of the participants would still prefer to exercise in public spaces such as the Nile Corniche, streets, and public gardens.

Figure 13. Public space and physical activity chart in the case of the reopening gyms and the sport clubs (source: Aziz, 2020).

1.3 Hurghada, Red Sea Governorate, Egypt

Egypt’s Red Sea Governorate covers 1080 km of the coast along the country’s eastern border on the red sea, housing a population of 380,184 (CAPMAS, 2020). It is one of Egypt’s most popular tourism destinations, given its beautiful beaches, natural reserves, and mountains. Hurghada is the Red Sea capital, with a population of 95,622 (World Population Review, 2020). Its population ranges from Egyptians to Germans, Russians, and more. Hurghada is divided into Northern and Southern districts (GOPP, 2020) stretching longitudinally across the coastline. The northern district is predominantly local Egyptian neighbourhoods and the governorate administrations’ centre. The southern district is a diverse social district and is mostly the tourism centre of the city (GOPP, 2016).

As much as COVID-19 affected everyone around the world, a tourism-based city – like Hurghada- was highly affected economically and socially by such a lockdown. Since COVID-19 first started spreading in Egypt, the Egyptian Prime Minister and Health Minister put Hurghada in the primary tourism and city lockdown with Luxor and Aswan in March 2020, before the national curfew regulations took place (AFP, 2020).

The field observations describe the city’s procedures and its residents’ adaptation during curfew and lockdown from March till July on the waterfront and walkways in Al-Amal, Al-Sakalla, & Al-Dahar Neighbourhoods. Some of Hurghada’s public spaces were locked such as Al-Nasr promenade in Al-Dahar (see Figure 15). Other multi-use spaces (i.e. supermarkets, services) worked until curfew such as Sherry promenade in Al-Sakalla (see Figure 16). Overall, the city’s dwellers followed social distancing, so public spaces had very little traffic. Given the constant adaptation of curfew hours throughout
the country, Police forces roamed around the city, to ensure that outlets are closed on time. In addition to the police forces, the streets were physically blocked during curfew hours to block motorized and non-motorized traffic.

Figure 14. Everyday morning traffic (motorized and non-motorized) in the city’s local center, Dahar square (source: Abdrabou, 10 March 2020).

Figure 15. Banned public spaces during COVID-19 (informally walked through by passersby), Al-Nasr Promenade, Al-Dahar, Hurghada. (source: Abdrabou, 28 July 2020).
Many national occasions took place during COVID-19 lockdowns such as the Coptic Easter, the Pharaonic Easter, and Ramadan. As those are outdoor gatherings feasts where Hurghada is a national vacation destination, they required further regulations by the governorate. Boat trips (private or rented) were banned, beaches and Corniche were blocked (see Figures 17 and 18) (Altayry, 2020), and trips from and to Hurghada were banned too.
Meanwhile -based on observations- it can be argued that Hurghada’s residents’ adaptation to the COVID-19 regulations, such as the outlets and services’ opening hours kept developing along with the curfew. More foreign residents found their way through the city using bicycles for transportation, given the emptier streets along with Hurghada’s southern districts, which were mostly occupied by tourists such as Sheraton Street.
With no occasions or feasts, Hurghada’s residents found an outlet in visiting the city’s Corniche, spending time watching the sea, and enjoying the fresh breeze along Al-Amal and Al-Hadaba zones. Moreover, the little hidden openings on the beaches allowed people to take a dip into the water, since all beaches are closed, while some enjoyed their time fishing. Another outlet is a newly developed public space Al-Sakalla Promenade within a residential zone, where residents around this walkway went out before curfew hours with their families to enjoy a distant outdoor walk (Figure 19).

Throughout those restrictions and procedures, the online questionnaire investigated the social usage of the city’s public spaces further. 43.9% commuted to work by their private cars, and 26.8% by public transport and 9.7% commuted via non-motorized transport before COVID-19 broke out. During the pandemic, public transport use for work commute decreased to 11.9%; and since 46% started working from home during COVID-19, 19% did not commute to work anymore. Leaving the house for more than work during the COVID-19 pandemic shows that 76% went shopping, and 23.9% went running and walking.

Before COVID-19, about 73.3% of the respondents shopped in supermarkets, 8.8% shopped in street markets such as Al-Dahar and the Old Markets; During COVID-19, almost 90% shopped in supermarkets. As for the public spaces’ usage, most respondents stayed home, while about 62% of the ones who went out used the city walkways, and 26.5% went out along the City Corniche. The public spaces usage rates during COVID-19 decreased by 74.4% of respondents and increased by 18.6%.

In conclusion, Hurghada included custom procedures given its coastal and tourism status. Its residents preserved social distancing according to the online survey while making use of the developed public spaces based on the field observations.

2. Amman, Jordan

Amman, the capital of Jordan has a population of about 4 million residents (Population Stat, 2020) living on an area of 799.93 km² (Municipality of Greater Amman, 2020). The city of Amman is known to be divided into East and West, there is no clear-cut border between them, yet it is known that the Abdoun corridor and Al-Urdon Street are where the conditions of the built environment change. East Amman is known to be the affordable part of the city compared to the western part of it; facilities and services are not of the same high quality they are in West Amman, but they do exist in the east (Khalifa and Krysiek, 2019). Figures 20 and 21 show the differences in the built environment between the East and West of Amman.

The observations in this case study focus on the Western side of the city, in specific Al-Rabiyeh and Umm Uthainah neighbourhoods, both of which lie in the heart of West Amman. Due to the restrictions in movement and lockdown during the time of research, Al-Rabiyeh and Umm Uthainah were easily accessible to the researcher. While the questionnaire had participants from different parts of the city; East and West. The first case of COVID-19 was recorded in Amman on 2 March 2020. The situation continued to be contained up until 15 March 2020 when the country recorded 12 new cases for people entering the country and people who were in touch with them. Those new cases resulted in a precautionary governmental decision to suspend all departing and arriving flights to Jordan aiming to prevent the spread of the virus (Roya News, 2020a).
As the cases started to increase slightly, the government announced a nationwide comprehensive curfew in Jordan that started on 21 March 2020 at 7:00 a.m. The curfew prohibited the movement of people whether it was using cars or on foot, as well as the closure of all shops and businesses. It also included the suspension of educational institutes, prayers in mosques and churches, sports activities, and movement between governorates. Any violation of the curfew orders results in paying fines, but the
punishment could go up to imprisoning the person for up to a year. Air raid sirens went on at 7:00 a.m. announcing the start of the curfew (Aljazeera, 2020). This complete lockdown lasted for four days. Before lifting the comprehensive curfew, the government initiated the delivery of bread and basic grocery to resident's doorsteps using public transportation buses on 24 March 2020. This method was efficient and successful in some neighbourhoods, while it failed in other neighbourhoods. Therefore, on the 25th of March, the curfew was partially lifted, allowing residents to shop for essential items from nearby markets from 10:00 a.m. to 6:00 p.m. Small to medium markets were open along with bakeries, while hypermarkets remained closed. Citizens could move on foot, while public transportation and taxis remained not functioning, and the use of cars was still prohibited. This partial curfew went on for nine days up until 3 April (Middle East Monitor, 2020). Those strict measurements controlled the use of public space, yet in a way, they motivated citizens to maximize the use of the public space -in this case, the streets- within the set limitations. Citizens started slowly reclaiming the streets in their neighbourhoods.

From the 3 April, the government alternated between a comprehensive curfew on weekends (Friday and Saturday) and a partial curfew (permitting pedestrian movement from 10:00 am to 6:00 pm) on weekdays (ibid.). During this period and as a result of those drastic governmental measures, Amman did not only practice social distancing, but it also witnessed an immense change in the socio-spatial behaviour of its residents; people were not only using streets to walk to their destinations -grocery shops- but they were also walking to be active. A resident living in Shmeisani expressed “now we feel that the streets are ours finally” (female, 50s). Families and individuals were seen going for long walks, streets that were once filled with cars are now filled with people either walking, riding bicycles, skateboards, and scooters. According to the questionnaire that included participants living in different areas in Amman, only 7% of the 70 participants used to walk, and none of them cycled as a means of transportation before the pandemic. On the other hand, 51% started walking and 4% started cycling to get to their destinations during the pandemic, while 47% of them picked up the habit of walking or running as physical activity. This immense increase in numbers indicates the willingness and need for public space.

Figure 22. Residents in Amman taking up walking as a daily activity (source: Nowar, 2 May 2020).
Bicycles were relatively heavily present in the streets, even though the hilly nature of Amman does not make the city bicycle-friendly. A resident living in Dabouq used his bicycle to go to Al-Rabyieh to run an errand, the 10 km travel distance took him about 40 minutes to reach his destination due to the various hills that came his way. “During my trip, I have witnessed at least 40 bicycles on the streets, and that is impressive for a city like Amman” (male, 30s).

Figure 23. Residents in Amman using bicycles and skateboards in public space (source: Nowar, 21 April 2020).

Figure 24. The use of bicycles on the streets of Amman increased (source: Nowar, 20 April 2020).
The demand for bicycles has increased during the lockdown; it has been noticed through the number of people inquiring about bicycle shops to buy or rent on different social media platforms, below shows some examples from different Facebook groups.

Figure 25. Bicycle demand increased during the curfew in Amman (source: Expats in Amman Facebook group, 2020).

40% of the respondents stated that during the pandemic they started using nearby open spaces to their homes; which in this case are represented by the streets of their neighbourhoods -as public parks remained shut until 1 July 2020. This percent is remarkable when comparing it to the situation before COVID-19, where residents usually preferred to drive to certain areas to walk or sit outdoors; people started reclaiming their surrounding public space as they realized its importance when vehicle movement was prohibited. Starting 29 April 2020, the government allowed vehicle movement from 08:00 a.m. to 06:00 p.m. according to their license plate; alternating between odd and even license plates daily, and a full lockdown of Friday (Roya News, 2020b). As the number of cases was decreasing and the situation in the country stabilized, the government lifted the curfew until midnight allowing all vehicles to move every day including Fridays on 6 June (Grada World, 2020). As the measures and restrictions started to ease up, the number of pedestrians and cyclists decreased in the streets of Amman, yet not to the point, it was before the pandemic. a resident who started using public space during the pandemic expressed that “the measures and regulations set during COVID-19 reminded us that we can and should use the public space in our city, it is our right” (female, 50s). The pie chart below illustrates the behaviour of residents towards public space.
On the other hand, some negative behaviours have been observed in public spaces; such as the littering of gloves and facemask in the streets. Nonetheless, this phenomenon has encouraged a sense of awareness and belonging by some residents which drove them to initiate campaigns that aim to protect the built environment and public space. “De-Litter” campaign is one example; the founder of this initiative, Nerissa Abu Hanna started by collecting the COVID-19 related waste during her daily walks, this motivated her to start this initiative and invite people to join across the country, each operating in their neighbourhood to collect those plastic gloves and facemasks (The 8 Log, 2020).

Figure 27. De-Litter page on Instagram as a movement concerned with public space (source: De-Litter Instagram page, 2020).
The awareness and sense of belonging to the public space have shifted; more people are joining this campaign, organizing, and communicating through its different social media platforms. The figures below show the campaign’s Instagram profile, as well as an example of the waste collected on a two-hour walk.

It can be concluded that the measurements set by the government as a result of COVID-19 had a positive impact on the act of reclaiming public space. The culture of public space has witnessed an immense change during the lockdown; residents started using the streets to walk, cycle, and do sports. Many walked to their destinations, even when vehicle movement was allowed again, and the sense of belonging to the public space has increased which can be visibly observed through the cleaning campaigns that took place. This is a turning point for a city like Amman, that is lacking the culture of public space.

3. Berlin, Germany

Berlin, the capital of Germany with a population of about 3.6 million, living in an area of 891 km² with a density of 4,118/km² (City population, 2020). Berlin has 12 diverse districts; each district has its characteristics. The districts are still categorized based on their location; east and west, while the centre of Berlin is referred to as Mitte (Porter, 2019). The focus of this study is a street called “Sonnenallee” in Neukölln district, as it is one of the hotspots of the pandemic in Berlin and a high percentage of its residents are Arabs. Sonnenallee is a street known in the past for its Lebanese stores and Shisha cafes. In 2015, the street became more vibrant as a huge influx of Syrian refugees inhabited it (Reuters, 2018).

Figure 28. Prenzlauerberg in West Berlin where social distancing is not present (source: Gaballah, 1 June 2020).
On 24 February 2020, German Health Minister Jens Spahn announced the arrival of COVID-19 to Germany, yet not in Berlin. The first case identified in Berlin was on 2 March, while the total number of cases in Germany was 150 cases. In many regions, supermarket shelves were empty because of the high demand and the fear of the pandemic. During the third week of March, Berlin's Universities postponed the upcoming semester, the clubs and bars were forced to close, events with 50 or more people were forbidden and many businesses were forced to close, as well as the opera and concert halls. Berlin and different states came up with different measures to slow down the spread. Nonetheless, on 16 March, the Robert Koch Institute\(^3\) (RKI) increased the health risk level for people in Germany from moderate to high. Berlin’s city centre was very quiet, yet hundreds of Berliners met at parks in the afternoons. During the last 10 days of April and the first week of May, certain types and sizes of shops were opened; the schools, playgrounds, and museums reopened. On 23 April, additional COVID-19 aid packages worth billions of Euros to help employees, people who lost their jobs, mid-sized and small companies, students, and schools. On 15 May, the German government released the COVID-19 mobile application which alerts users when they have been in contact with persons infected. However, the residents were not pleased with the measurements set by the government that restricted their movement and life. They started staking actions to reclaim their public spaces and the culture of public space that is the essence of life in Berlin. Therefore, on 9 May thousands of Germans demonstrated against those measurements in the capital (DW, 2020); which resulted in a month after the reopening of pubs, fitness centres, ballet schools, casinos, gambling halls, churches, mosques, and synagogues within certain regulations, as well as protests with an unlimited number of people were legal again.

\(^3\) The German official institute responsible for the health of German citizens.
with strict rules. European Union (EU) and Schengen countries opened their borders for EU citizens and residence permit holders with some exceptions. Berlin developed a traffic light system for COVID-19 encompassing three numbers to assess the situation of the pandemic, and based on the traffic light the regulations were set either to be relaxed or strict. Those regulations included: basic obligations, protection and hygiene regulations, the maximum number of persons and bans, quarantine measures, final provisions, and general instructions on the schedule of fines. Regulations regarding socio-spatial behaviours included the minimum distance between people in a public space, the use of masks in public transportation, the measures regarding events, and outdoor activities. Starting August events will be allowed to have up to 500 people, and by September the number will go up to 750. That lead to an increase in using public open spaces, it had been observed that people in the city preferred to open public spaces over closed ones during those times.

The use of bicycles as a means of transportation during the time of the pandemic has immensely increased, residents found it more convenient to use their bicycles than the public transportation system in the city, a participant explained; “it is a hassle to use the transportation system in the city now with the new regulations, it is easier and safer to use my bicycle”. As a response to that the state of Berlin started developing new bicycle infrastructure around the city as the need for that was vital (Benecke, 2020). Even though the culture of public space in Berlin exists for a long time; the importance of public space in the city has increased, residents have relied on them more than before. 56% of the participants claimed that their usage of public space in Neukölln has increased; 37.5% of them use public space 3-4 times per week. The use of bicycles in this part of the city followed the trend in the city as a whole as well; 71.8% of participants started using the bicycles solely during the pandemic. However, based on the observation, social distancing seems to be not considered in Sonnenallee (Arabs street), on one hand, due to the nature of the shopping street and its high density during the day, on the other hand, due to high level of social bonding and intimacy in
the Arab culture, mainly between relatives and friends, which requires direct body contact (e.g., hugging and kissing for greeting each other) (Al-Nasser, 1993). This was reflected later (in October 2020) on the high number of COVID-19 cases to be the highest in Berlin.

In a city like Berlin, where residents are already aware of the importance of public space, reclaiming it was evident. The use of public spaces during the pandemic increased due to the minimum recreational options available at certain times. This indicates the importance of maintaining suitable public spaces in the city as well as providing sufficient bicycle lanes, which the state already recognized.

**Discussion of Findings: Comparative Analysis**

The results of the study indicate that the large range of the activities occurring in the public space are necessary activities, according to Gehl (2010), despite the fact of the poor and unfavourable condition of the cities’ public spaces (New Cairo, Mansoura, and Amman) that does not provide adequate opportunities for social and optional activities. The study shows that the residents of the five studied cities have reclaimed their public space in their own ways during the pandemic. It was noticed that in the cases of New Cairo, Mansoura, and Amman, the regulations were a turning point to change how residents perceive and use their public space; people started doing sports in the streets, walking to their destinations instead of using the car, their awareness towards the environment and public space have increased, as they were eager to use it. Hurghada has also witnessed the same behaviour from its residents, yet those behaviours in reclaiming public space are not particularly new to the city due to the touristic nature of the city that might have helped in creating the culture of using public space, residents have been using them before the pandemic and continued to do so during the pandemic, in accordance to the governmental regulations. Avoiding crowded spaces (e.g. street markets) was not possible as shown in the cases of Mansoura and Berlin due to the fact of prices affordability that matches certain economic categories of residents.
The study shows that in Berlin, the cultural background of Arabs has not formed an obstacle for them to follow the regulations set by the government, except for the big gatherings and the social distancing due to the cultural social norms. In the case of Berlin, using the public space was present as a part of the culture before the pandemic, and the infrastructure is well prepared. However, the use of public spaces by Arab residents (such as parks) has increased, but what was immensely noticeable is the increase in the number of cyclists in the city, people relied more on bicycles than public transportation to avoid crowded buses and underground. The local government of Berlin was very responsive to the behaviour of the residents, as they started establishing new bicycle lanes and widening some of the existing ones, temporarily turned some streets for pedestrians only as a response to the heavy pedestrian traffic in some areas. These governmental reactions and responses towards the residents’ behaviour are lacking in the case of Egypt and Jordan. In Amman and New Cairo, some negative behaviours were observed, throwing the waste masks and gloves. The availability of data varied from one studied city to another, which could have had an impact on the residents’ behaviour in public space. This was clear in Berlin’s case when the residents were well informed about the number of cases and their locations, they were cautious to use those spaces, even if the government did not quarantine and temporarily close those areas. The German government collaborated with Esri, Robert Koch Institute, and the Institute for Hygiene and Public Health at the University of Bonn to create an online platform to follow up with the new cases all over Germany in general to the level of districts and making the information available and accessible for all residents. In addition to launching a mobile application to track and inform the residents on active cases. The same thing happened in Amman, where the government alongside the Ministry of Health launched a website and a mobile application to keep the citizens informed. Yet, this has not been so effective in the Egyptian case, although the government has launched an app to track the COVID-19 but was not used by the majority.

Conclusion and Recommendations
Governments have experienced immense pressure dealing with COVID-19 and they still are, yet each city has dealt with COVID-19 differently; different measures were implemented in each of the studied cities, they have also been changing with time depending on the severity of the situation, availability of data, the capacity of its health facilities, population density, and people’s culture. Therefore, some governments were more responsive adapting to the rapidly changing situation than others. On the other hand, people in different cities have responded differently to those measures depending on those factors as well. Nonetheless, residents in all studied cities - whether they were in the MENA region or Europe- were immensely connected to their public space regardless of the condition of those spaces and the level of preparedness and response of the governments towards public space. New patterns of behaviour have emerged. Unfortunately, those behaviours were not only limited to positive ones; as some of the studied cities have also witnessed a new type of waste being littered in public spaces, but gloves and masks also were not discarded properly, they were filling the streets in some areas of some of the cites. This needs more attention from governments to raise the citizens’ awareness.
On the other hand, governments - especially on the local level - have to be more aware and responsive to the change in the residents’ behaviour, and accordingly, take decisions supported by urban designers, such as constructing new bicycle lanes, and giving the priority to pedestrians over vehicular movement. In the time of the COVID-19 pandemic, public space becomes even more crucial for citizens – as shown in the studied cities. This raises the question: To what extent our streets are well designed to be efficient public spaces? and is this going to continue and develop into an urban planning process for resilience? Consequently, the paper highlights the importance of co-producing and co-designing public space, especially in such times.

Hence, the paper recommends a collaborative framework, and an integrated approach in designing public spaces, that includes the local community in cooperation with urban planners and governments; as a lesson learned from Berlin’s case, where the government listened to the needs of the citizens and responded accordingly. On the other hand, the city dwellers’ adaptation is a promising start in reclaiming their public spaces; as governmental measures (New Cairo, Mansoura, Hurghada, & Amman) stimulated a drastic change in cities where the use of public spaces used to be minimal. More interdisciplinary studies are needed between several disciplines: urban planning, political sociology, environmental psychology, behavioural studies, public policy, cultural anthropology, and public health. This would help to reach a better understanding of the relationship between governments measures and people’s behaviour in public space.

References


Fostering Interactions at Public Open Spaces. The Role of Physical Interface in Facilitating User Interactions in the UAE

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Abstract
Over the past few decades, the importance of public open spaces has been substantially increased due to rapid urbanization and developments. Likewise, cities and communities in the Arab world are also going through urban transformation; driven by the global context in which cities are being reshaped along with the modernization of urban planning themes. Over the last 15 years, Dubai has emerged as one of the world’s fastest growing cities. It has been associated with the desire to build tall buildings as a statement of modernity, globalization, and economic prosperity, which lead to a rapid growth in population; breeding many environmental and urban planning challenges. Hasty urbanization, demographic, and economic growth alongside land privatization process has progressively changed the nature and theme of public open spaces within the United Arab Emirates (UAE) in turn creates a gap between social life and community urban planning. The regeneration of public open spaces in cities of the UAE is a major issue as multiple factors must be taken into consideration during the design stages. This paper aims at understanding the role of physical interface of the public open spaces in context of UAE and its transformation over the years. These spaces act as a catalyst which accelerate this transformation of urban scenario and there by citizens life. Open places play an important role for bringing people closer and act as a socio-cultural entity for the sake of improving social life and interactivity. Social well-being arises from a sense of security, belonging, familiarity, support, cohesion, and integration of social groups, based on respect for different cultures, traditions, and backgrounds. Hence this research analyses the influence of such tangible and intangible elements in the public open spaces, through which the social interaction happens and offers unprecedented experience to the users, visitors and urban community alike.

Keywords: Arab cities, social interaction, urban phenomenology, architecting interactions, redefining urban spaces

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1. Introduction
Cities are more than just buildings and structures. They are a complex blend of natural, built, economic and social components. Over the past two centuries, more public open spaces have been developed in European and North American cities to build the interaction between people and their communities (Gruen, 1960). Consequently, several other countries around the world have followed this trend and pattern of urban development, and similarly, cities in the Middle East have endeavoured to do so. However, to accomplish this, a lot of planning and numerous factors need to be taken into consideration.

When we talk about public open space it is important to understand its meaning in relation to two other terms which are associated with it, that is, open space and green space. In most of the cases both these terms seem to be used loosely and interchangeably. In this research the term 'Public open spaces' refers to all the spaces that are characterized under ‘public use’ of the city which are open and accessible to all the citizens regardless of gender, race, ethnicity, age or socio-economic level of the individual. According to the definition of PS by Charter of Public Space it should be free from any profit motive and enjoyable to all (Garau at al., 2013). These spaces encourage the meeting of new cultures, fostering the public’s understanding of interconnections and thereby extending ways for the socio-cultural interaction within a unique platform.

The realm in and around these spaces, the amenities provided within its built environment along with their location have a huge impact on the user interactions that take place in the physical interface of these sites.

There are several alternative ways to classify these public open spaces, based on ownership; government restrictions on usage; and accessibility of the space to the city dwellers. (Tibbalds, 2004) Gehl studied European cities with an aim to understand the relation between outdoor activities and the physical environments, such as the architecture, pathways, and landscaping. Communal open spaces, regardless of size, function and type, are generally considered essential facilitators of healthy social interaction (Gehl, 1987).

Various literature studies on public realm indicates how most of the Middle Eastern cities over the past two centuries suffered urban degradation in terms of its public open spaces (Yarwood, 2011). Modernization and industrialization resulted in progressively disconnected neighbourhoods with declining popularity of urban squares (a public place where citizens assembled, worked, shopped, or simply mingled lost its relevance).

1. Significance and scope of the study
This study is to signify the role of physical interface of a space for promoting interactions among its users in context of public open spaces in the UAE which are open and accessible to all the city dwellers as well as tourists regardless of gender, race, ethnicity, age or socio-economic level of the individual.

With the help of case studies this research also examines the effectiveness of developing public open spaces of different hierarchy in the UAE and its relevance in providing the context for fostering interactions among its users. In addition, this research focuses on the concept of new urbanism in the UAE by integrating public spaces as a sociocultural entity within the existing as well as upcoming urban fabric for the sake of improving social life and developing vibrant environment.
The research is largely based on observations drawn by case studies and no real sampling was pursued; hence, the findings of the research are purely qualitative in nature. However, the case studies were carried out by the authors not just from an academic perspective but also as city dwellers who are a frequent user of these public open spaces and understands its relationship with the city.

2. Research methodology
The paper aims at understanding the role of physical space in encouraging user interactions in the context of public open spaces. The study relies on theoretical analysis, observations and critical assessments of public open spaces based on existing factors and principles that are known to foster interactions in the physical realm. The research presented here starts with understanding the theories related to human interactions followed by qualitative analysis of public open spaces of different hierarchy at the level of city, community, and neighbourhood, in the UAE. The research also focuses on the rhythms of public life in UAE with the aim of understanding how these public spaces developed, evolved, transformed and are understood as well as used over the decades.

3. Interactivity, interaction and space
It is first important to understand the difference between Interaction and interactivity. Interaction is a combination of two words ‘inter’ and ‘action’ which means action happening between two entities whereas interactivity is affiliated with technology and digital world. We live in a physical world with predominantly physical interactions. Thus, space acts as a physical interface for the interactions.

Figure 1. Different types of interactions in a space (Source: Author generated illustration)

These interactions can be broadly categorized in three different categories (Hughes, 2017):

a. Interaction between users and space
b. User interactions within the space
c. User interactions through the space

Now whatever the interactions are, or whichever user is involved in it, the space thus becomes the context for interaction, thus giving meaning to it.
4. Theoretical background
A) Principles for interaction

Based on the literature studies, the basic principles which can be identified to promote interaction in a physical interface are (but not limited to) Proximity, Diversity, built functionality and Interaction Nodes. Theodore Newcomb first documented the effect of proximity in his study of the acquaintance process, which demonstrated how people who interact and live close to each other are more likely to develop a relationship. Similarly, Diversity in the user group brings in an array of ideas and ideologies, thus, in turn sparking interest for interactions. Whereas Build functionalities also play a crucial role by creating spaces that have more than one function in it. These in turn has a potential of developing as nodes and Interaction points; which are accessible by a diverse user group; and act as common hubs for interaction. Apart from these principles there are various other factors that further helps in promoting interaction in open spaces. The matrix below shows a relationship between these factors and principles which in turn help fostering interactions in a physical interface.

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<tr>
<th>PRINCIPLES</th>
<th>Proximity</th>
<th>Diversity</th>
<th>Built functionality</th>
<th>Interaction Nodes</th>
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<td>FACTORS</td>
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<td>Social Inclusion</td>
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Table 1. Matrix showing the relationship between various factors and principles of interaction (Source: Author generated).

1) Connecting people: The design should have spaces which allow people to approach one another. Apart from physical connectivity, visual connectivity also plays a key role in this.
2) Accessibility and inclusivity: Spaces which are easily accessible and connects different functional areas and user group acts as interaction nodes within the space.
3) Building facades: This factor revolves around openness & connections, by creating transparent and seamless structures which aid to building visual connections that help user not just to interact with the spaces within the structure but with its surroundings as well.
4) **Creating multipurpose and multifunctional spaces**: By creating spaces which have more than one function helps in attracting a greater number of users to it and hence acts as common nodes for interactions.

5) **Facilitate the unexpected**: Creating elements of surprise in the design gives the user common topics to interact.

6) **Eye-level design**: This deals with the scale of spaces and the connections/flow of spaces from one function area to another. Creating eye level designs help create engaging user experiences.

7) **Daylight**: Reflecting, illuminating, inviting atmosphere helps promote interactions.

8) **Informal spaces**: Designed spaces which are informal in nature helps users to be comfortable and relaxed.

9) **Comfort**: This includes both physical and psychological comfort of the users along with light, colors, materials, textures, and furniture and building amenities.

10) **Social Inclusion**: The design should facilitate civic participation, social mixing and evoke a sense of belonging to its users.

**B) Human interaction theory**

According to (Dewey, 2003) in general there are two levels of human interaction. The first one is symbolic interaction, which is uniquely human and second, non-symbolic interaction, which is shared with infrahuman. The basic reason for human interaction according to (Dewey, 2003) which is associated with moral conduct, was the active connectedness of human beings with one another, which is characterized by their "mutual intertwined activities" such as desire, beliefs, judgment, satisfaction and dissatisfaction. Human interaction then is influenced by individual need towards the environment and how the perceived benefits might influence negatively or positively are based on the self-judgment. Thus, it is vital to know about the society and the people needs and preferences (Maslow, 1954) provides a good example for identification of the basic needs and creates a foundation for the same.

![Figure 2. Maslow Hierarchy of Human Interaction Needs. Source: (Maslow, 1954)](image)

**C) Theory of phenomenology**

Phenomenology demonstrated in architecture is the manipulation of space, material, and light and shadow to create a memorable encounter through an impact on the human senses. This theory promotes the integration of sensory perception as a function of a
built form. This in turn creates an experience that is beyond tangible, but rather abstract, both in observation as well as perception. An analysis of this aesthetic through interpretation of its qualitative elements and the exploration of case studies by phenomenological theorists, Alberto Pérez-Gómez, Peter Zumthor and Steven Holl, as supportive evidence highlights its fundamental characteristics as a theory, in contrast to a more rationalist design approach (Holl, 2007).

The architecture and design of the space influences the community by incorporating human activity with adapted site context, organized programmatic and interstitial space, and exploration of material. As defined by theorist Vernon Bourke, rationalism is a theory in which the criterion of the truth is not sensory but intellectual and deductive. (Bourke, 1962) Rationalism produces a layered system of scientific reduction, whereas phenomenology delivers layers of sensory details such as emotion informed by design features of light and shadow, material and spatial perception. A new interpretation of functionality within design exists in the phenomenological construct. Architecture is designed to serve the needs of human activity; therefore, creates a relationship between human senses and the building to transform emotion and perception. Christian Norberg-Schulz stresses that the environment influences human beings, and this implies that the purpose of architecture transcends the definition given by early functionalism (Norberg-Schulz, 1980).

Phenomenology is the function of quality. In phenomenology, space is determined by the development of fluid, flexible space and the utilization of interstitial space. Steven Holl elaborates on an architectural synthesis in the book, Questions of Perception, suggesting, foreground, middle ground, and distant view, together with all the subjective qualities of material and light, form the basis of ‘complete perception. (Holl, 2007) This establishes the necessity for place making through sensory observance. Material is the tactile form of phenomenology that facilitates memory. Light and shadow create a playful interaction of colour, texture and related emotion associated to the space. The contrast between these can be sharp or blurry depending on the desired effect. This strategy can create depth and display texture and is one of the strongest design features in phenomenology. Thus, Phenomenology becomes an evident way to establish the urban Semiology of orientation in a psyche-sociological way of understanding how a space is experienced and lived by its inhabitants. (Mounin, 1980) Hence the imagination of users which is generated through spatial communication is basically the experience of movement, which is delivered and achieved through careful designing.

D) Architecting interactions
Architecting interactions explores designing for interactions through space in which space act as a physical interface to stimulate human, analogue and digital interactions. All our actions are nothing but one or the other form of interactions. The process of creating spaces that promote interaction is generally considered as a four staged process. The first three stages of this process happen before the project is delivered whereas the fourth stage comes after the delivery of the project (Hughes, 2017).

The process is as follows:
Stage 1: involves understanding the design brief, identifying the problem. This is done through consultation from the different stakeholders of the project and taking inputs from them.
Stage 2: involves developing a ‘shared vision’ with the client.
Stage 3: involves bringing the vision into reality and the execution of the project.
Stage 4: comes after the delivery of the project. One of the important things to do in this step is observing – it is important to see how people are using the space and reacting to it. This helps in creating a renewed understanding of the project, thus making the process a continuous circular nature.

5. Urban open spaces in UAE context
For more than 2000 years, the public open spaces have been a distinct characteristic of the Western cities and for the last 200 years the city planners of European and Northern American cities have ensured to include such spaces with in the city plan with an intention to bring the people closer. In the United Arab Emirates (UAE), the prominent features for public gathering in most traditional communities were Al Musalla which was a large, open space mostly isolated from the residential areas or neighbourhood boundary and located outside the city used for political events, social gatherings, military; Al Masjid or Al Jawamie which had a large central courtyard; Souq (the market); Sahat (plural of Saha) which were open spaces located at a y-shaped junction of two streets within a neighbourhood, dominated by grocery store (Hakim, 1986) to name a few, but since the late 1960s, some of these features have gradually disappeared from the urban planning.
Modern urban design concepts appeared in the mid-19th century during the colonial era, when establishment of governments, industrialization and the onset of the agricultural revolution led to a considerable amount of development of the Middle Eastern cities (Germeraad, 1990) This subsequently created new infrastructural requirements like increased demand for roads and vehicle accessibility, causing erosion in the open spaces.
Efforts to maintain Arab-Muslim identity increased in the region with the 1960 after the establishment of the Arab League. Nonetheless, the Middle East considers implementing western urban design a developmental necessity (Ezzeddine & Kashwani, 2019). There has been a transformation in the understanding of public open spaces in the region both in terms of the design concepts and usage. Middle Eastern governments have allowed western concepts to be introduced into cities; including the urban landscape techniques.
and concepts of natural reserves, playgrounds, recreational spaces, managed beach areas, outdoor sports areas, waterfronts, streetscapes, and squares and plazas; as a part of the modernization process.

Enhancing the physical quality of public spaces not only helps in improving liveability but also acts as an active node for people to interact which in turn affects the lifestyle and health conditions of the surrounding population. According to (Katzmann, 2004), a public space experience may reduce depression, enhance contemplativeness, and provide a sense of peace. Contemporary research on the use of public open spaces verifies beliefs about stress-reduction and mental health. Urban and landscape scholars collectively indicated that residents living in communities with common spaces have reported lower levels of stress, aggression, violence with increased sense of belongingness and safety.

5.1 Evaluation of public spaces in Dubai
Various aspects of a city’s open spaces, such as maydan, saha and rahba, have been used in Islamic cities for a long time. Currently these public spaces, which were made with an intention for the people to socialize and interact, are almost neglected in the urban and city planning design strategies implemented in the Middle east cities.

The Emirate of Dubai witnessed two periods of urban development (Figure 4). The first was between the year 1970 and 2000, which represents three decades of conservative urban development. The second phase occurred between 2001 and 2015, which includes what was call the “Boom” period. During both these phases, there was a shift in the perception of the open spaces at both urban and community level.

Figure 4. Map showing different phases of Urban development in Dubai
(Source: Author generated)
The city of Dubai has grown considerably in the past six decades. Over the time, the city has lost its concept of spaces like saha, al baraha or fereej area which is surrounded by the houses and approached by Sikka (narrow pathways). These historic public spaces were used for entertainment, social collaboration and as market space by the residents within a pedestrian-friendly environment. Al Shindagah and Al Bastakiyah are the two areas in Dubai which still have these spaces till date that were restored by the Dubai Municipality around the end of the 1970s. There is, therefore, a need to understand the nature of the urban spaces that are emerging within the community, to achieve inclusive and liveable neighbourhoods. Similarly, urban planning has transformed the old community open space to either a commercial intersection of main roads which is dominated by vehicle movement or have been put under use as parking lots to serve the trading domain (Ezzeddine, 2014). As a result, the public open spaces had been converted from social spaces that were characterized by vibrant, lively interaction into areas supporting the infrastructure needs and the transportation within the city. To understand the current nature of these spaces in the year 2020, the author conducted various case studies as a part of the research, which is discussed in the section below.

5.2 Case studies
The various tools used to conduct this research are quantitative in nature. Three different sites were selected for the study which are Dubai water Canal, Dubai Marina Walk and Community Park in a small residential area in Remraam, Dubai. These case studies have been selected; keeping in mind various parameters like location (sites from both new and old Dubai area), hierarchy in terms of size, dominant land-use of the surrounding areas and the dominant user groups; to get a holistic understanding of the diverse nature of the public open spaces in the UAE (Table 2).

Figure 5. Map depicting the location of the case study selected for the research (Source: Author generated)
Table 2: Selection criteria and public open spaces selected for the study (Source: Author generated)

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<tr>
<th>Parameter</th>
<th>Water Canal Dubai</th>
<th>Dubai Marina Walk</th>
<th>Remraam Community Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hierarchy</td>
<td>City Level</td>
<td>Community Level</td>
<td>Neighbourhood level</td>
</tr>
<tr>
<td>Dominant land-use of the surrounding</td>
<td>Mixed-Use and commercial stretch connecting old Dubai and New Dubai</td>
<td>Mixed land-use</td>
<td>Residential Community</td>
</tr>
<tr>
<td>Development authority</td>
<td>Meraas Holding &amp; Maidan Group (Govt. owned)</td>
<td>Emaar Group (Private Group)</td>
<td>Dubai Properties (Private Group)</td>
</tr>
<tr>
<td>Ownership</td>
<td>Government</td>
<td>Private</td>
<td>Private</td>
</tr>
<tr>
<td>Dominant user group</td>
<td>Tourist’s Place of interest and recreational space</td>
<td>High Income group</td>
<td>Middle and high-income group</td>
</tr>
</tbody>
</table>

5.2.2 Dubai Water Canal
The 3.2km long and 80 to 120m in width water canal Dubai cuts through Dubai’s main artery; the Sheikh Zayed Road across Safa Park; creates 80,000 sqm for public space which includes various facilities like 3km running track, 12km cycling path. It stretches from the old Creek and passes through the Design District and Business Bay to join back in the Arabian Gulf. On the course, it also cuts across the Sheikh Zayed Road. Apart from being a tourist attraction in the city, the canal also functions as a means of transport. One of the prominent features of this site is a mechanical waterfall- a motion-operated water pumps which creates an illusion of throwing water over the bridge in a constant flow, illuminated by multi-coloured lights. This spectacle is visible from the promenade, and automatically gets switched off when boat is detected in closed proximity by the sensors installed. Out of five, three pedestrian bridges provide access to the visitors across the canal at key nodes. Being at the centre of the downtown Apart from connectivity these bridges provide stunning vistas of the Dubai skyline and of the water vessels below.

Dubai Water Canal is noteworthy for its excellent environmental friendliness. The 12kilometer cycling track offers a risk-free and beckoning spot for riders, away from the traffic. Hundreds of street lamps and decoration lights across the water canal are powered by solar panels that charge up during the day time. These lamp posts also have mobile charging stations in them providing both safety and functionality to the users. The design is fluid and inviting in nature with spaces which allow people to approach one another. Apart from physical connectivity through pedestrian walkways, visual connectivity between different function areas and nodes also plays a key role in fostering interactions among the visitors.
Figure 6. Dubai Water Canal and prominent features (Source: Author generated illustration)

Figure 7, 8, 9: Prominent features across Water Canal (Source: Author’s Photograph)
5.2.3 Marina Walk Dubai
Dubai Marina is a mixed-use development of over 150,000 residents where manmade water canal plays a central role and focus for each element of the area. Site area of Dubai Marina is 1,140 acres of which 12% of the area is in the form of Waterways and Marina keeping in mind the concept of a ‘city within the city’ to shift the perceived centre of Dubai further along the shore of the Gulf.
Marina Walk is a pedestrian promenade, a stretch of around 8km, comprises of sophisticated Urban centres of office tower on above floor with retail and entertainment fronting the pedestrian walkway. Restaurant, hotel and performing art centre is a cultural heart of the community.
The mixed-use development is planned with the aim of creating a new focus for high-density development establishing a continuous, 15m-wide strip of land around its perimeter. This central public space covers around 12% of the total land area of the site. Although much of this area is occupied by the marina water surface, it also includes landscaped public walkways, creating a recreational zone along the waterfront with views into the various water basins and a closer relationship with the water.
In addition to the marina waterway and promenade, the important components of the public realm are the streets, avenues, and parks, which together create the framework for the development. The main access to the site is through a series of boulevards which are skilfully landscaped to create stunning vignettes. Residential building entrances are provided in a way to encourage active pedestrian circulation and to create functional and visual links between the buildings and the marina.

Figure 7: Map showing Marina Walk and connecting bridges with prominent recreational zones (Source: Author generated illustration)
Shopping areas and facilities like restaurants and cafes are strategically located along the promenade around the perimeter of the marina and along major boulevards. All residential development is within a five-minute walk of the marina promenade. The detailed design of the promenade frontage, with its convertible retail arcade that opens in winter and closes for climate control in summer, and its pedestrian connections between the residential buildings and the waterfront, has been a prominent consideration throughout the development. This creates new standards for the pedestrian environment in terms of quality and character as it facilitates interactions and connectivity throughout the perimeter. Dubai Marina also promotes a sense of community and inclusiveness that celebrates the region’s natural and cultural resources. As Dubai continues to prosper and grows, the
project’s compelling public spaces and thoughtful urban design serves as a permanent source of ideas and inspiration for future developments around the city.

5.2.4 Community park – Remraam, Dubai
Remraam community located in Dubailand is known for its natural view and greenery which offers its residents a mix of nature and artificial landscape. Thoughtfully designed, it offers a perfect balance of serenity as well as accessibility to different functional spaces in the community via a large central garden and play areas. Various facilities and features like walking tracks, basketball, tennis courts, swimming pool, kids play area acts as active nodes to attract the residents in turn providing a context for them to socialize and interact with each other.
Along with the central garden the design has 37 building podiums with open sitting spaces, gazebo’s, sand pit for kids, swings and designated places for small gathering with barbeque facilities. Basic amenities like supermarkets, pharmacy, salon and food joints also acts as catalyst to attract people and act as active nodes for socializing. The central park is used for various types of outdoor activities like food festivals, competitions, Halloween and Christmas celebrations, pool parties and movie nights; the events are designed to bring the community together and create a place which brings a sense of belongingness to its residents.

Based on the multiple site visits done to the selected sites and the information gathered during the course of the study; the table below shows the analysis of the three selected case studies based on the different indicators and parameters that are considered important for providing context for interaction or helps in fostering it among the users or visitors in public open spaces (identified through the literature study).

Figure 8. Key plan showing various facilities provided in the open space in the community area of the residential development (Source: Author generated illustration)
6. Discussion

Consistent urbanization, demographic, and economic growth alongside, land privatization process have progressively transformed the nature and use of public open spaces within the UAE. The remaining squares and plazas in the UAE, which were places for social gathering or public entertainment, no longer hold true to their nature and have now been converted to roads and street intersections or have been deconstructed into parking lots. Until the mid-1980s, there was an increase in eradication of squares (one of the prominent public open spaces in the past) all over cities of the UAE (Ezzeddine & Kashwani, 2019). Thus, creating a clear gap in the development of these public open spaces where some of them are left underutilized and others were claimed for infrastructural developments.

The key problem identified in the study is that the process of urbanization in the UAE; since the discovery of oil; has led to the loss of open public spaces, with consistent weakening of social coherence and stability, accompanied by ignorance of sustainability in the longer term. The public open spaces have been converted from social spaces that were characterized by vibrant, lively interaction into areas supporting the infrastructure needs and the transportation within the city.
Table 3: Comparative analysis of the sites selected for the study on the basis of various parameters which helps in fostering interaction among the users (Source: Author generated)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Dubai Canal</th>
<th>Dubai Marina</th>
<th>Community Park – Remraam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting People</td>
<td>By providing facilities like pedestrian pathways, Cycling tracks and aesthetically pleasing vignette.</td>
<td>By providing facilities like pedestrian pathways, Yacht facilities, by integrating common sitting spaces, gazebo, and restaurants with outdoor sitting facilities.</td>
<td>Pocket park at podium level and ground for each building with barbeque and children play area promoting social interaction. Community park with swimming pools, tennis court and football court along with kids play area and open green space provides place for many community level events.</td>
</tr>
<tr>
<td>Accessibility and Proximity</td>
<td>Canal works as a connection between new Dubai and old Dubai. In proximity to prominent areas like Safa Park, Medcare hospital, JW Marriott.</td>
<td>Dubai tram Connectivity with prominent areas like JLT, JBR Beach and JBR walk. Interaction nodes within the space connectivity of each residential streets with the Maria walk</td>
<td>Accessible to prominent surrounding areas like Dubai sports city and Dubai motor city. Basic amenities like open restaurant, Caffe, supermarket, pharmacy to fulfil individual need of the residents</td>
</tr>
<tr>
<td>Visual connectivity</td>
<td>Direct visual connection to various facilities from prominent nodes</td>
<td>Direct visual connection to various facilities from prominent nodes</td>
<td>Direct visual connection to various facilities from prominent nodes</td>
</tr>
<tr>
<td>Eye level design</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lighting</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Multipurpose and multi-functional spaces</td>
<td>Mobile charging stations at lamp posts. Connecting bridges at prominent areas where bridges itself has its own importance</td>
<td>Entertainment, restaurant, and cultural art centre fronting the pedestrian walkway creating different types of gathering places.</td>
<td>Central park and gazebos used for various small-scale events and parties.</td>
</tr>
</tbody>
</table>
Facilitate the unexpected

| Motion-operated water wonder pumps, water through the bridge in a constant flow, visible from the promenade, and can be switched off when a sensor detects a boat nearby. | Central park and gazebos used for various small-scale events and parties. |

Comfort

| Yes | Yes | Yes |

Social Inclusion

| Apart from the facilities and civic attractions provided at the site, the space further strengthens social inclusion by acting as the arena/platform for cycle racing, marathons (Dubai Canal run) and other events organized by Ministry of Health and Prevention-UAE | The space facilitates social inclusion by successfully integrating activities like Dubai International Boat show, street art and performances, cultural events like 'The spirit of the union' which attract a diverse group of users to the site. | The community frequently organises festivities to celebrate festivals and important dates from all cultures and ethnicities in the community park. Fun activities for kids and grown-ups in the form of movie nights, small scaled fairs, potlucks etc. are frequently a part of the community's yearly event calendar. |

A consequence of this was that the social fabric of community life was eroded. Despite support from the UAE leadership and regulatory authorities for developing sustainable communities in line with global compacts, the gap between social life and community urban planning was yet to be filled. Cities and communities in the Arab world inevitably faced urban transformation, driven by the global context in which cities are being reshaped, and the modernization of urban planning themes. There has been a change in the understanding of public open spaces in the region both in terms of the design concepts and usage. Middle Eastern governments have allowed western concepts to be introduced into cities; including the urban landscape techniques and concepts of natural reserves, playgrounds, recreational spaces, managed beach areas, outdoor sports areas, waterfronts, streetscapes, and squares and plazas; as a part of the modernization process. Social well-being evolves from a sense of security, belonging, familiarity, support, cohesion, and integration of social groups, based on respect for different cultures, traditions, and backgrounds. Based on these approaches, the researcher appreciates the new urban planning policies adopted by decision-makers and urban planners in the UAE to develop open spaces in the new community master plans which regulates and includes new design guidelines. Looking at the new developments in the past few years and the upcoming projects it is evident that the ongoing regeneration of public open spaces in cities of the UAE is taking multiple factors into consideration during the design stages, including the proximity, aesthetics and attractiveness of the location of the space; its accessibility by all population groups along with meeting the requirements of disabled and elderly people. However, this study also hints at an optimistic future for the development and management of such public spaces. It appears that it is not just the physical environment and accessibility that encourages or discourages people to come out such places in public, but also the purpose, use, facilities provided and an opportunity to explore new and distinctive vignettes in a comfortable and adaptive environment.
7. Conclusion and recommendation
The author recommends that the potential public spaces as well as the existing underutilized open spaces should be developed/redeveloped to intensify their use. The gap between the existing and the requisite open spaces (according to the standards) of all hierarchical levels should be bridged. Since the economic value of land encompassed within the municipal planning is high, it is pivotal that open spaces which are multifunctional in nature should preferably be developed.

The author further recommends that the remaining gap in some of the existing spaces can be bridged through local mitigation of urban temperatures in summer; eye level design; increasing inclusiveness; providing active nodes in design which acts as areas that attract the users in turn giving context for interactions; creating multipurpose and multifunctional spaces; use of eco-friendly materials; ensuring comfort and a sense of safety; reuse of old elements; and using structural techniques and materials that display long durability and resistance to outdoor conditions. These factors can further lay a strong foundation for designing such spaces within the UAE. Meeting all these factors widens the level of interaction among the city dwellers. However, this crucially requires carefully planned strategies and policy models.

References
Post-development Practices of Public Space, Between Cohabitation and “Domination” of New Atmospheres. 
The Case of Rabat Dock in Morocco

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Abstract
Public space becomes a major issue during urban restructuring. To better understand this specificity, we chose the Rabat’s dock developed as part of the Bouregreg valley development project, as a case study. This space, with its background, has been subjected to a profound restructuring as part of the project. The study of the social uses and practices of citizens through their manifestations in this space makes it possible to identify the evolution of the relationship between the transformation of spatial structures and the production of landscapes representative of the image of the urban area. The transformations brought by this mega-project in our study area show new urbanities. In front of a tendency to micro-appropriation by the upper social classes and the tendency to a smoothed and polished urbanity, a more diverse and more complex urbanity is found, which oscillates between a consensual social sharing of public (physical) space and / or maintaining old practices.
In order to be able to clarify these issues, we have adopted a methodology combining in situ observation protocols - day and night - and qualitative interviews with the users of Rabat dock.

Keywords: Morocco, urban project, public spaces, social appropriations, uses

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1. Introduction
Public spaces in the Arab cities have moved to the top of the political agenda of urban planning authorities. Whereas they were simply considered as simple spaces "left behind" after an urban development operation, they continue to climb the ranks of urban planning to become today the cornerstone in the transformation of the Arab cities (Berry-Chikhaoui and Deboulet, 2002).

In this context, the sea and river facades of Arab metropolises have become the windows of their new ambitions (Algeria, Egypt, Morocco, Tunisia, United Arab Emirates (UAE), etc.). In the case of the city of Rabat in Morocco, the banks of the Bouregreg river were a place of work for fishermen and "flaikiyas" (barcassiers), of games and outings for their inhabitants as well as a service area (customs, nautical club, yacht club…). These shores were undefined spaces connecting the twin cities (Rabat and Salé) at very specific points. They were often described as wasteland and bad crowds. At the beginning of the 21st century (2004) the banks of the Bouregreg River in Rabat became a site to frequent, a place to visit, to live, to consume and meet, a scene where to see and be seen. Since then, the socio-economic transformation of the site has accelerated and the reputation of Bouregreg universalised.

This article is based on research undertaken for three years combining in situ observation protocols - day and night - and qualitative interviews with the users of Rabat dock.

We are going through this case to show how the public space is socially marked, divided, disputed or negotiated, and how the practices (collective or individual - private or public) which take place there, have in common to shake up at a given moment the ordinary rules of occupation of public space.

2. The Bouregreg Valley: a changing site, an ambitious project

“The bouregreg Valley project is one of the icons of Morocco’s commitment to water front development and “showcase urbanism” project” (Barthel and Mouloudi, 2009, p.56)

The Rabat’s Dock, which lies down below the old medina of Rabat and the Oudayas, facing the city of Salé, have long remained undefined spaces. The only forms of anthropological use and function were seafood gathering, fishing and boat trips, which linked the twin cities at specific points. These banks remained disconnected from the rest of the city for many years, despite the various plans with diversified objectives and development variants that have followed one another since the first half of the previous century (Mzaiz, 2011, pp. 132-140).

1 It should be noted that Brunot, L. (1921) differentiated between “Barcassier / Babriias” and “Batelier / flaikiyas”. Because each of them had their own corporation and carried out different activities. However, the term “barcassier” often comes up despite the fact that the clients use the term of flaikiyas.
2 This research was carried out as part of a doctoral dissertation prepared at the Institut National d’Aménagement et d’Urbanisme (INAU-Rabat) and defended in December 2018.
After half a century of attempts to redevelop the Bouregreg estuary, a specific development plan for the Bouregreg valley was finally driven by a royal will, which gave it strong legitimacy and an ability to mobilise national and international economic and financial actors. The official document, entitled “Parti d’aménagement global de la vallée du Bouregreg” (PAG), displays the ambitions of the project:


In this official document, the project is presented as the symbol of a desired opening of the metropolis on ocean space, illustrated in Figure 1. The project is therefore part of a logic of "invention" - to borrow a phrase from Corbin (1990) - of the shores, through a staging that facilitates its social and symbolic appropriation by different actors. Promoted as an “opportunity … for all the actual and future inhabitants” of the two cities, the project tries to invigorate the capital’s prestige as an attractive destination in the Mediterranean area. The Bouregreg project occupies a territory of approximately
6000 hectares, subdivided into six consecutive sequences\(^4\). It entails the construction of a port for cruise ships, two marinas, luxury hotels and apartments, commercial centres, a conference centre, offices, a high-class residential islet (Amwaj), an amusement park, a technopolis, a golf course and eco-tourism facilities (Bogaert, 2012, p. 261).

It should be pointed out that in the contemporary development operations observed on a large international scale, the impression of standardization is such that it is sometimes difficult to differentiate a new public space from another, a new neighbourhood from another. It is often felt that the same "solutions" are being implemented here and there: the conversion of brownfields into cultural spaces, the transformation of riverbanks into convivial places, the use of the same materials, the same curves and the same architectural forms, have thus gradually become “imposed figures” of urban planning. Thus, the use of teams of "starchitects" (Gravari-Barbas, 2015) also contributes to this impression of standardization: large public facilities here and there play the role of totem, a signal that a city has entered the international metropolitan competition. The ways in which these stars of architecture and urbanism can be integrated into projects are varied (in some cases, these are urban planners with whom foreign investors are used to working. In other cases, developers have entered into masterwork contracts with city planners or architects who have been advised to them for example, French architect Bernard Reichen or the London firm Foster and Partners, or the British architect Zaha Hadid). And the orders passed on to starchitects are multiples (production of urban and architectural specifications, design of public spaces on the Bouregreg valley and elaboration of detailed master plans).

With regard to the participation of the inhabitants, it should be stressed that in the Moroccan legislative context, the public inquiry is the only time when public consultation is imposed by law on projects requiring the development of a development plan. While the main purpose of the law was to facilitate the implementation of the project by means of this very democratic initiative, the developer, obliged to implement it, came up against the obstacle of a hostile public opinion. Indeed, "the inquiry into the Bouregreg Valley Special Development Plan (PAS) was organized at a very (too) advanced stage of the project preparation procedure [...] as a result, it was the starting point for the mobilization of the inhabitants" (Mouloudi, 2015, pp. 319-404).

Bab Al Bahr sequence (Sea Gate), which interests us here, is the first milestone of the project supposed to create a new centrality, a place of consumption, meetings and territorial marketing. Bab Al Bahr project covers an area of 30 ha, including 530,000 m² dedicated to high standing residential units, hotels (5 stars), services, facilities, as well as a set of entertainment and leisure centres including the Cité des Arts et des Métiers, a craft, commercial and touristic complex. It includes also the tram link between Rabat and Salé and the Hassan II bridge on the BouRegreg. In addition to these two infrastructures, the Bab Al Bahr project has planned the construction of a marina, a port.

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\(^4\) The development perimeter is subdivided into six consecutive sequences: Sequence 1: Bab Al Bahr corresponds to the Bouregreg estuary, between the medinas of Rabat and Salé, downstream of the Hassan II bridge; Sequence 2: Assahat Al Kabira, between the Hassan II bridge and the Office National des Chemins de fer (ONCF) bridge; Sequence 3: Kasbat Abi Raqraq, between the ONCF bridge and the Mohammed V bridge; Sequence 4: Sahrij El Oued, upstream of the Mohammed V bridge; it covers the plain located at the bottom of the slopes of the Akreuch plateau; Sequence 5: Al Menzeh Al Kébir; it corresponds to the Shoul plateau; Sequence 6: lookout on the Hssaine plateau.
on the Atlantic, a tunnel, as well as commercial and tourist facilities, as illustrated in Figure 2. Its overall cost is estimated at 535 million euros (Mouloudi, 2015, p. 160).

Figure 2. The different components of the Bab Al Bahr sequence (Source: Agence pour l’Aménagement de la Vallé Bouregreg)

Figure 3. The Rabat’s dock on the Oued Bouregreg (Rabat) (Moussalih, 2016).
The first public spaces covered by this sequence were delivered in 2007, including the Rabat’s dock, as shown in Figure 3, which constitutes one of the main elements that make it up. This public space was designed by the Bernard Reichen agency, Grand Prix de l’Urbanisme français in 2005. It consists of a 1.5 km promenade along the Bouregreg River with cafes and restaurants on land and on stilts. A landing stage is reserved for barcassiers which, for a long time and a few dirhams, ensure the crossing between Rabat and Salé from several mooring points. The dock has been fitted out according to classic international standards (street furniture, materials and lighting) that can be found on all waterfronts (Chaline, 1994; 1998) on the planet: cobblestones, protective guardrails in the style of a passenger gangway, designer lighting, etc.

3. How urban transformations affect the social use of public space:
Public planners, through their intervention in spaces - long ignored on purpose or without, and "left behind"-, act on these portions of the city through their legitimacy of action as a guarantor of the public interest and proceed by their own means (financial, human and technical, etc.), their knowledge, know-how and expertise of national and international design offices. Their interventions obey organizational, political, or economic rationalities which depends on the power of the initiators. In this way, they institute, in these interstitial spaces, new rules of use and practices (no swimming, no fishing, no selling, etc.). These new rules are given in legal and architectural configurations. They do not constrain social interactions so much but rather offer directions for their smooth running.

Thus, designers by planning, constructing and implementing their spaces, try to install both their own image, those of the public spaces produced and dictate their modes of use. They predefine the theoretical profiles of the users and anticipate the way or ways in which they will be appropriate. The legal operationalization of public space will undoubtedly have a considerable impact on public spaces use. Because, uses resulting from the legal register do not necessarily correspond to the rules inspired from social register. In other words: "rules on paper" replace "rules in use", and "law in the books" is opposed to "law in action". This standardization of public spaces detaches more than it attaches and considerably or even dramatically reduces “uses” which, according to De Certeau (1980), refers to “ways of doing”, “instructions for use” of an object or a space that differs from the modes of use programmed by its inventors and producers. These ways of doing provide information on “the arts of doing” (De Certeau, 1980) and the “city dwellers skills” to co-produce public space. (Berry-Chikhaoui and Deboulet, 2000).

4. Disappearance of old uses and emergence of the sea promenade

“My father used to swim across the river in the 1930s and 1940s. Today, we cannot help thinking of the barcassiers and fishermen of Salé and Rabat whose activity dates back to the dawn of time. Myself, I remember, as a child, having taken these boats several times and, on the return trip, we bought fresh fish that we brought home. I am
sure that many Rbatis (resident of Rabat) and Slaouis (resident of Salé) remember this.”
(A statement of a resident from Rabat, author’s translation).

In the history of the city, Bouregreg was first a place of work, for fishermen and flaikiyas, a site of games and "outing" for the inhabitants of the city and a space partly occupied by port’s services (Nautical Club, Yacht-Club, etc.). Its banks have never been reserved for walking and promenade.

Figure 4. The flaikiyas in activity after the development of the banks of the Bouregreg river.
(Moussalih, 2015).

Beyond social and economic functions, Bouregreg also ensured an identity role, being both a place of memory and festive celebrations, with an important heritage dimension. Statements collected during investigations (semi-direct(structured?) interviews), photos and documents from archives highlight "traditional" uses of the dock (swimming, fishing, passage, etc.). These places were also part of traditional and seasonal practices, such as the N’zaha ", a party organized outside the medina and requiring the ascent of the river to reach the vestiges of the Chellah.

5 Chellah site is located on the left bank of the Bouregreg, 4 km from the Atlantic coast, and some 100 from the Almohad enclosure in Rabat. It occupies the slopes of two hills. Because of its topographical and geographical situation, the site offered favorable conditions to human occupation from the earliest Antiquity (7th-6th centuries BC): a fertile territory, abundant water sources, forests. and a site open to both the river and the ocean. Chellah site includes a. The ancient archaeological site of Sala; b. The dynastic necropolis of the Mérinides; d. The sacred natural site of the eel pond.
“Oued Bouregreg, otherwise known as the” Grenades Valley "or" Asmir Ravine ", was known and appreciated because, in the spring, the inhabitants of Salé had to cross it to organize picnics at the foot of Challah, at the occasion of the N’zaha festival. The inhabitants of Salé spent pleasant days aboard boats accompanied by musical troupes, "troupe de melhoun" (melhoun (المحنون) Arabic word which brings together all poetry in Maghrebian Arabic, whether Bedouin or urban) cheerful and jubilant atmosphere. They continued their activities by preparing meals before attending theatrical performances, al bissat and halqa (the oldest forms of traditional theater in Morocco), in tents set-up for this purpose. The activity continued until al asr prayer (mid-afternoon), before the crowds returned home» 6(Author’s translation).

Observed in Morocco since the 18th century, but practiced long before, the Spring festivals or N’zaha celebrated the renewal of nature (Gillot, 2008, p.58). The tradition of N’zaha, which means “outing”, is a festivity that celebrates the beautiful spring season, in a friendly, artistic and playful spirit. In Marrakech, this spring ritual takes place in the famous gardens of the ochre city, known as the Agdal. In Fez, the tradition of N’zaha was to get out of the city and spend a day in the hills planted with olive trees that surrounded the city. The picnic in the green was the highlight of this day: “Dissociated from the wilderness, the countryside has tightened around the element that has become central: lunch” (Gillot, 2008, p. 58).

Today, with the layout of the dock, the emergence of promenade represents a revolution in this interstice space. Inherited from the aristocratic practices of the end of the 17th century (Rieucau, 2012), the promenade became in the 19th century a bourgeois practice, providing entertainment and relaxation to its followers, encouraged to do so by doctors and place of sociability (Delpal, 2002). Beyond the aspects of well-being, it was also an opportunity for ostentatious expression of wealth and a form of urban culture (Turcot, 2005).

The walk as a form of urban expression based on the movement of the body, forms a sort of “ambulatory urbanity” (Rieucau, 2012), in which the bodies cross, touch each other, and slip away: « “This public space “geosymbol of urbanity” constitutes both a spatial and social object […] functioning as a societal scene, […] for certain social groups, in [which] they show themselves” (Rieucau, 2012) (author’s translation). Place of a certain cosmopolitan sociability at the same time inclusive and exclusive, it is invested in urban symbolic landmark, an outing, a privileged moment of self-demonstration. It has diversified, adapting to the new lifestyles of permanent and temporary residents to become one of the essential places of the contemporary city and an object cherished by the actors of the urban fabric.

In a few years, the Rabat’s dock has become the competitor of Rabat’s downtown (mainly avenue Mohammed V). Its massive appropriation by different social strata greatly exceeds the expectations of its designers. It offers indeed a possibility of relaxation and recreation both to the middle and upper social categories and to the working classes. But also, a space of freedom, interaction and socialization for children, youth and women.

5. A public space structured around three archipelagos

“Within each city, the wealthy upper classes develop and reproduce in new forms a position of authority, material and symbolic domination over the lower classes, contained in a codification of social relations”.
(Dris, 2005, p.207) (author’s translation).

Going from the postulate that the city is the concretization of the image that society makes of itself, and that the spatial structure is the expression of the social structure, "Rabat’s dock" is subdivided socially and spatially into public area and “restricted” access area. Different kind of barriers contribute to a fragmented organization of public space which refers to the figure of the archipelago. In the light of these archipelagos, Rabat’s dock can be interpreted as a laboratory of urbanity. Its production gave birth to a dual urbanity: the urbanity of the favoured westernized strata (the middle class and the upper middle class) represented by the second archipelago and the urbanity of the disadvantaged class (the poor)- in the first and the third one -, more diverse and more complex. This leads us to question the capacity of public spaces in the Arab world to unite several sociological types that coexist without aggressive interaction.

Figure 5. Social fragmentation and archipelago structure of uses within the Rabat quay.
(Moussalih, 2015).
A selective archipelago
Franchised cafes and restaurants, in the second archipelago, - intended for a higher middle class - which line up on this dock, as does the “Dhow” (restaurant-bar-lounge), a rather luxuriously furnished boat, stowed at the quay in Rabat and which reminds boats stowed in this way on many urban Waterfronts - set up a certain selectivity of the clientele, while nearby, people are walking (especially large families from working classes) and the flaykiyas continue their traditional activity (archipelago number 1). This configuration is not exclusive to the Rabat’s dock, it has already been denounced in other places and for other services (McDonald; KFC and Starbucks) as pointed out by Graioud:

"franchised fast-food places are accessible only to a privileged bourgeois clientele that generally shuns café’s not only because of the café’ gender bias but also because of class issues" (Graioud, 2007, p. 534).

This reality reproduces the dominant spatial division in the city. Several filtering factors - explicit and implicit-, of the clientele appear in other public spaces in the city of Rabat, as Serhir (2017) points out:

“in Hay Ryad, when a visitor or a potential client manages to pass the filter, objective or subjective - that, in the latter case, of his own representations -, which gives him access to the city center and that he manages to practice it, he finds himself confronted with another barrier, that of prices. Most visitors find them prohibitive, which dissuades them from buying in a franchised shop or from taking a meal in a restaurant, an ice cream, or even a coffee on the terrace […] In these ways which operate “spontaneously” a selection of customers there are public screening practices, the most explicit of which is the ubiquity of security guards”
Indeed, these factors contribute to establishing a selectivity within the places, difficult to identify, because other issues and aspects of public spaces, invisible a priori, can act as a barrier to their use by some people, as shown by Karibi (2015, p. 24):

“the frequentation of the different places of the city not being systematic, it takes place in a selective manner, first according to the means of transport and secondly according to the economic accessibility of individuals to the amenities of the urban space. Some people find themselves resigned to restricting themselves to the proximity of their homes” (author’s translation).

Other factors also participate in this selectivity, such as certain objects like potted plants and glass installations on cafe terraces which are transformed into symbolic barriers installing physical and psychological boundaries between the ambulatory public space and the private space. These different barriers contribute to a fragmented organization of public space which refers to the figure of the archipelago. Consequently, these cafes become a meeting place for a young and solvent clientele from the upper middle classes who put their stamp on it, to use the expression of Jolé (2006, p. 119). The place is fashionable for this clientele, but the competition is fierce. In some sense, what has so far been a space for all will perforce become a semi-privative if not totally private space for those who are able to afford it.

*Shared archipelagos*

So what about the working classes? It shares the first and the third archipelago. The first one offers a long walk along the Bouregreg River furnished with relatively spaced benches. This portion of the wharf drains a large crowd of visitors. In this confused space, street vendors set up shop there while waiting for their customers. The third archipelago represents a public space punctuated with fast food kiosks and it is the privileged place for young couples and large families of the lower middle class to have a snack after a long walk. Thus, the massive frequentation of Rabat’s dock by the *underprivileged classes* does not appear as an answer to a need for communion that the inhabitants of the city feel who are swept away by the interminable meanders of everyday life! The desire to move away from the everyday environment of the neighbourhood of residence, the desire to frequent a space charged with symbols of modernism and freedom and the search for a distraction - free or paid - or unusual meetings that can occur in a public space where the socio-economic markings of the day work differently, and mark a momentary break with the banality of everyday life. In his essay on the transformation of Moroccan society in contact with the West, Adam said of leisure in the urban society of Casablanca that “Moroccan man formerly had parties, he had no leisure. The proletarian of Casablanca has free time, he no longer has parties” (Adam, 1972, cited in Berriane, 1992, p.32). The success of this public space, among the working classes, gives city dwellers the opportunity to recreate this festive atmosphere which presupposes an intense collective life.
Figure 7. Formal uses and transgressive appropriations share the first and the third archipelago (A. Moussalih, 2015).

Otherwise, alongside the formal uses of the public space, transgressive appropriations emerge particularly in these two archipelagos. Yes, the layout of the quay of Rabat has led to an evolution of uses in an attempt to bring them up to international standards; the users, for their part, through various practices, tricks and resistance tactics, claim a metaphorical city that resists the dominant city.

The authorities’ desire to adhere to the codes and customs of high places of globalization (Gravari-Barbas, 2013) is accompanied by an attempt to standardize uses which involves the interference of socio-spatial practices and of standards imposed by designers. This attempt at normalization takes the form of prohibitions, with a large number of prohibition signs, which aim to eradicate all traditional practices and forms of appropriation of the place by the inhabitants of the popular strata, especially those from the nearby medina (angling, swimming, diving, games, etc.). These attempts encounter daily resistance which is expressed in the form of regular transgressions: the young people continue to swim and dive, the fishermen always hope to bring back fish, while the itinerant merchants always go in a group to another looking for clients.

Teenagers from the old medina of Rabat (in the Al Malah neighbourhood, in particular) and Salé’s districts (Moulay Ismail and Al Karia neighbourhoods), often in groups, come to dive and swim in Bouregreg river despite the prohibition signs. They seem to reconnect with secular activity. In a space punctuated by numerous prohibition signs which dictate and guide the behaviour of users. Swimming in Bourgereg represents a form of daily resistance which is expressed in the form of regular transgressions. Gwiazdzinski (2009, p.347) reminds us in this regard that “adolescents did not wait for the 21st century to change a fountain into a swimming pool during heat waves or transform a public garden into an improvised classroom”.
The street vendors, for their part, give the quay an image of a permanent market that does not fade until the end of the evening. They furnish the space in an anarchically coherent way. They actually play a compensating role by satisfying the needs of a large part of the users of the Rabat’s dock. The diversity of the offer (juice, popcorn, cotton candy, coffee, tea, cake, games for children, etc.) combined with the accessibility of the price allows users to satisfy their appetites during a walk or while waiting for a show to start.

This ambivalent situation, which expressly challenges the norm, calls out to the way in which designed public spaces are received and appropriated from below.
Formerly “inhabited” (Dardel, 1952) and crossed by the inhabitants of Rabat and Salé, the dock has become a place of symbolic clashes between the logic of traditional appropriations and a model more in line with international standards and clichés of urban marketing. Despite the attempts at control, the dock is a living place where mixed forms of arrangements, coexistence and sharing between activities and men are developed, and between men belonging to different social groups and whose cultural models are more or less distant from each other. It is undoubtedly a relative failure for developers and managers who doubtless dreamed of a sanitized place more in line with the expectations of city dwellers and national and foreign tourists. Here, the researcher finds material for thought on the "creolization" of spaces, uses and identities in movement (Gwiazdzinski, 2016). These daily practices evolve during major ritual events.

6. A space for social relaxation

“… Where do lovers meet? Parents? Simply unthinkable. In the hotel? Even for those who could afford it, it is impossible7 […] We therefore find ourselves in cars, in the forests, near the beaches, on construction sites or on vacant lots. With this terrible anxiety of being discovered...” (Slimani, 2017, pp. 20-21) (Author’s translation).

Contemporary public spaces (malls, sea promenade, etc.) in the Arab world offer women a meeting space, but also a space for autonomy of movement, opening up and above all anonymity, modulated at their convenience. It obviously allows day and night meetings for couples, at a time when the social standards in this space are not as rigid compared to the community spaces (the neighbourhood of residence, for example) which control their behaviour.

“It must be said that, in general, Moroccan society was subject to the yoke of an ancestral tradition and the weight of a strong community power. Individuals were cared for and framed by these traditions and power, from birth to death. […] Gerontocracy and paternalism were the two traits characterizing this social organization” (El Ouarti, 1998, p.21) (author’s translation).

In the same vein, Durkheim notes that

“in large cities, the individual is much more freed from the collective yoke [...], each one has all the more facilities for following his own sense that it is easier to escape this control [...], the pressure of opinion is felt with less force in the big centers. It is that everyone’s attention is distracted in too many different directions and that, moreover, we know each other less, [...] the sphere of free action of each individual actually extends, and little by little, the fact becomes a right” (Durkheim, 1986, p. 330).

7 According to Moroccan law, a hotel establishment is entitled to request a marriage certificate from couples wishing to share the same room.
Rabat’s dock also offers to lovers a few places where they can escape the curious gaze of users: cafes, spaced benches. Gradually, the Rabat’s dock, especially in the afternoon and evening, during the summer season, becomes a love area. Young couples in love take over the place, meet there often at sunset, and isolate themselves there from the gaze of the curious: lovers take each other’s hand; chat in peace, without fear of being heard by the people seated on the nearby benches and exceptionally, taste a furtive kiss. If young girls from wealthy backgrounds can go with their boyfriend, discreetly, to restaurants, cafes, those of popular backgrounds, however, have little choice:

“By frequenting café’s, a young woman runs the risk of being seen in the company of a male, a fact which can ruin her social reputation” (Graiouid, 2007, p. 534)

Thus, Rabat’s dock is among the public places they can frequent with their friends:

“The public space is then, an” outside” where they bypass and deviate from established standards. The romantic encounter subject regulated [in Arab societies] by prohibitions that the public space allows to a certain extent to escape” (Dris, 2005, p. 205) (Author’ translation)

By the anonymity and blurring of identities that this place allows, a transgression of ordinary norms is reflected in behavior. It’s as if the dock is a space where the social constraint is less strong than elsewhere.

Figure 10. Rabat’s dock a love area for young couples in love (Moussalih, 2014)

Public space becomes the place where social constraint is relaxed, where greater freedom is allowed:

“Meetings “with others”, “with places”, do not lead to the creation of networks of intercommunication, non-surveillance zone or adventure moment only if they occur against a background of anonymity and familiarity” (Couratas, 1996, p. 99) (Author’s translation).

Public space would then be the place where we “veil” and “reveal ourselves” according to established standards and the fluctuations that affect them.
Post-development Practices of Public Space

In this sense, public space in everyday life, is a reflection of a generalized mercantilism which absorbs all social components, it is a space in which inertia and routine finally take over life. From where, therefore, arises the need for transgression or social escape from an asphyxiating and claustrophobic everyday life (Carretero Pasín, 2002).

7. Conclusion
This paper sheds light on the post-development practices of an interstitial space through the case of the Rabat's dock. The study allowed us to note that the development project of the Bouregreg valley has reconfigured the space and the banks of the Bouregreg river which were once “neglected”. In this sense, the creation of a public space with international standards inspired by the aesthetics of the river spaces of globalization (Shanghai, London, Rio de Janeiro, Nice, etc.) such as Layouts, models, lighting, curve, urban furniture, floor covering, restoration equipment, has certainly contributed to provide the city of Rabat with a modern showcase in order to maintain a positive and dynamic image in the global imagination. The approach adopted by Rabat fits perfectly into this framework and is similar to the strategies developed by cities, such as Barcelona, Budapest or Amsterdam. These issues have placed the creation of public spaces in the city on the urban planning agenda.

The political, town-planning, economic and social rationalities are set up as a filter to select populations and activities, the fact remains that the skills of users participate in maintaining traditional practices. In this sense, the co-presence of these two rationalities / competences even seems “problematic”, because it supposes a conflictual or consensual management between the two protagonists (the public authority and the population). However, despite these constraints and the restrictions imposed by the public authority, the very clean, civilized, westernized space is marked by local colours. The development of the dock has certainly contributed to the emergence of new urban practices that have found an echo in the society: the promenade as a form of leisure is well integrated. But also, a form of relaxation of rules that manage the presence of women in the public spaces of Arab cities.

Moreover, the massive occupation of this public space by children and adolescents reveals a need for freedom: freedom to play, run, jump, swim, sing, etc. The quay is transformed, thanks to children and teenagers, into a space of experimentation and creativity.

Finally, the stated desire of the public authority is to provide the city with an inclusive public space, the fact remains that within this same public space “islands” emerge, thus marking a social stratification that structures the Moroccan society. The boundaries between rich and poor seem to coexist more or less tightly.
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What Happened to the Public Spaces of the Arab World?
From Colonisation to Revolution: The Case of Lebanon

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Abstract

This paper critically assesses the circumstances under which the European idea of public spaces was imported and implemented in the Arab context. Starting with an overlook of the periods and the initial intentions behind the implementation of these spaces and going deeply into the case study of Lebanon. The context of Beirut, Lebanon acts as the set example of the whole paper with a look at the influence of colonisation and the unsettling situation post-independence, which resulted in an unbalanced development of the city with the various influencing factors that were deducted as mainly political and economic rather than social or cultural. With that background, the paper deduces that the intense political and colonial influences that led to the replication of the European public spaces in the Arab context were not sufficient for their success. This is backed up through a comparative study between Martyrs Square in Beirut and Piazza di Duomo in Milan, which share a similar form, but different culture and process of implementation. By reaching this conclusion, the importance of the social and cultural aspects in the success of public spaces was emphasized through a close spatial analysis of the example of the Lebanese revolution in October 2019, which was able to transform those spaces. This marked a proof as for how the essence of public spaces and their development should react to the needs of the people and their culture. It looks at how public spaces are made by the people. Nevertheless, the paper acknowledges the disparities between the regimes and systems of different Arab countries.

Keywords: political influence, social identity, public space, Beirut, revolution

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What Happened to the Public Spaces of the Arab World?

Introduction
A public space is meant to be the facilitator of democracy within a community (Rabbat, 2012). It is the space where people from all backgrounds gather and interact in a form of self-expression that enables the acceptance of their differences. This leads to the formation of a collective identity and vision towards the future. With the dominance of Islamic religion in the Middle East and the Arab world, it acted as the basis of the formation of gathering spaces in the region, reflected through the mosques (Rabbat, 2012). The mosque was the main space for gathering, and the operation room for all events, and even protests. Later on, and with the colonisation of several Arab countries by the Ottomans and then by European countries, their western ideologies spread into the Arab world where both tried to integrate the western public space into the Arab world in an intention of modernising its “oriental cities” (Fawaz, 2014). The journey continued even post-independence without the absence of the influence of the ex-colonial authorities as we will see in the city of Beirut, Lebanon later on. This process faced a lot of obstacles, as it imposed a foreign ideology with a lack of consideration of the disparities between western and Arab countries regarding the cultural, political, environmental, social and religious factors.

This paper will tackle this issue and try to answer whether the circumstances of implementation of the European public spaces in the Arab world were sufficient for their success, and what other factors that are essential to ensure the success of these public spaces. This divides the question into three objectives that the paper will strive to achieve. The first objective will be discussed as part of the literature review to first understand under what circumstances were the public spaces imported to the Arab region, and conclude the factors that influenced this importation. The second objective under the title “Evaluating spaces” is to evaluate the success, or failure, of the European-influenced public spaces in the Arab context. The third and final objective titled “Factors of success” would be to identify the lacking factors that have or could have played a major role in the transformation and domestication of these spaces.

In that manner, the literature review will give an overview on public spaces in Europe and their history, to further discuss the history and process of how these spaces were imported into the Arab world, with a focus on Lebanon and the pure role of politics. Moreover, after defining the methodology, the findings and discussion will go in parallel, and will be divided into two parts, each solely working towards the two objectives respectively. The first part will be achieved through a comparative study of two public space, one in Europe and the other in Lebanon; and the second part will achieve the last objective through a spatial analysis of the influence of the Lebanese revolution in 2019 on the use of the public spaces in Beirut. The focus on these will be on the social and cultural aspects.

Literature Review: Public spaces: from a European to an Arab context
As ancient Greece had its agora, Arabs had their mosques and medieval Europe had its public squares (Arch2o, 2020); so, what happened to the public spaces in the Arab world after the latter was imposed on it? When speaking of the success of public spaces in European cities, we need to understand that these spaces are born through a continuous historical evolution (Lennard, 2004). The process morphed them within the fabric of their cities, such as those in Italy and Greece. Such cities were built around
these spaces, guided by proportions and harmony with intended uniformity that holds you once you are there (Lennard, 2004). Also, it was part of the city’s formations, as it blended with religious and civic activities, housed temples and basilicas, shops and markets, theatres and public baths, which took part in embracing the space’s significance (Arch2o, 2020).

The European idea of a public space, or a square, started in the medieval western cities, and was introduced to the Arab world with an influence of colonial authorities. This began with the Ottoman Empire, which was influenced by the European standards in its developments (Rabbat, 2012), and then with the mandates of France over Lebanon, Syria, Tunisia and Algeria, Britain over Palestine, Jordan and Iraq, and Italy over Libya. This was a period between the late 19th century until early-to-mid 20th century, where most of these countries gained their independence in 1943.

The implementation was intended by the colonial authorities in order to provide its colonial settlers and military with a familiar European urban environment (Faleh, 2020). An example of this would be Tunisia’s Habib Bourguiba Avenue that was designed by the French during colonisation (1881-1956) for the elite as an image of the Champs-Élysées (Faleh, 2020). It also intended to distinguish between the new development and the traditional city, as illustrated in Figures 1 and 2.

A variety of foreign ideologies came along, those of which are social, economic, and cultural structures that were translated into alterations in the built environment (Rabbat, 2012). These alterations resulted in attracting the upper class and wealthy inhabitants, leading to a stronger social division, and also, leading several Arab cities, such as Algiers, Tunis, Cairo, Damascus, Beirut, Baghdad and Aleppo to enter the 20th Century with dualistic urban developments that were hybridized and heterogeneous (Rabbat, 2012). These two halves were represented as the modern and the traditional. That period came in parallel with the modernist movement, which through its functionalism, gave priority to the vehicular morphology. It undermined the relationship between a space and a building, and gave little attention to the evolution that forges the public realm with its history and identity; which is deemed essential in making it successful (Arch2o, 2020). It is undeniable that this movement had an influence on the erection of public spaces in Arab cities, where the main vision was in “modernising” them.

Figure 1. Habib Bourguiba Avenue -Tunisia (from: thetravelmagazine.ne)

Figure 2. Champs-Élysées -Paris, France (from JVelez)
The circumstances of Lebanon
After Lebanon gained its independence in 1943, the marks of the French mandate remained as a main feature in the city. Streets were named after victorious French generals of the World War I, such as Foch, Weygand and Allenby (Verdeil et al., 2008). As the downtown area of Beirut followed the “star shape” planning of Paris, also its public squares were superimposed on the existing old fabric of the city, such as “Place de L’Etoile” which was implemented in the 1930s, as shown in Figure 3. Post-independence, the colonial influence of the French authorities continued through some construction firms such as APUR (Atelier Parisien D’Urbanisme) and IAURIF (Institut d’aménagement et d’urbanisme de la région Ile-de-France), with a plan to modernise the city (Verdeil et al., 2008). However, their process was based on class and economic profit rather than the collective culture and identity of the city (Fawaz, 2014). In parallel, Lebanon faced an unstable period prior to its independence, leading to the outbreak of a civil war that lasted 15 years from 1975 until 1990. Throughout, various peace agreements were achieved, however, the tension, especially on the demarcation lines, which remained, led these agreements to failure. This created an unclear boundary between the time of destruction and that of the reconstruction of the city, where a variety of reconstruction initiatives started and stopped due to the renewal of the engagements. All these attempts left their imprints on the city, leaving it as an outcome of several plans of reconstruction that were never completed (Verdeil et al., 2008). Together, they formed a heterogeneous urban fabric.

After the war, reformations started in Lebanon, and specially in Beirut central district, which suffered drastically from the civil war (Sinno, 2020). In that manner, reconstruction began, but was mostly based on political powers under a sectarian authority, rather than the livelihood of the city and its citizens. The main aim was to foster economy, tourism, trade and real estate, while keeping balance between the conflicting sides (Verdeil et al., 2008). Eventually, reconstruction was commissioned to the Council for Development and Reconstruction; and in 1994, Solidere was formed as a real estate company responsible for the reconstruction of the city centre of Beirut (Sinno, 2020). The privatisation of the city centre made it lose its public essence. Due to
reasons such as high security, affiliations to certain political parties, the high prices and high real estate costs, the city was deemed accessible only for a minority of the upper class.

Solidere is the French acronym for the Lebanese Company for the Development and Reconstruction of Beirut Central District, incorporated as a Lebanese-joint stock company in 1994 (Van Pinxteren, n.d.). It is a private corporation that was given full control of Beirut’s historic centre and adjacent areas by the government. The reconstruction plan of Solidere focused on business, finance, real estate, tourism and leisure (Verdeil et al., 2008). This came at the expense of the heritage and the old landowners and tenants. However, the projects took it further to come at the expense of the centre’s identity and history, demolishing wide parts of the city, more than just the war-damaged structures (Verdeil et al., 2008). The benefit was for the private interest, as the state was focused on institutional reforms post the war (Verdeil et al., 2008). These demolitions widely included heritage buildings that were officially protected, and were replaced by towers or “trendy” entertainment spots.

From the literature that was put forward, we can deduct a variety of factors that influenced the circumstances in which public spaces were brought to the Arab world. Some of these factors, as seen in the case of Lebanon, were the influence of the colonial authorities, economic ambitions and profit, wars and the political powers and affiliations. In that manner, we could see that the main players in the implementation of public spaces were political and economic rather than social and cultural; two elements that were highly missing from the literature.

Rebuilding a city in the Arab world, a city torn by war and holding layers of unique social behaviours, cultural traditions, demographic diversity and an identity that was constructed with decades of struggle, became an outcome of politics and profit; of which did not address the actual needs of its citizens. Eventually, the vision for a world-class project, that can be compared to European standards, resulted in a high-cost area that did not play any role in the social transformation, but rather made it almost impossible to rent, work or live in the city centre (Verdeil et al., 2008). A major difference that we could realize in this process between these public spaces in European cities and in Beirut is their historical evolution within the development. In European cities, as mentioned in the literature, these spaces were forged within the urban fabric and its morphology as they developed through history (Lennard, 2004). They were also well studied and included a variety of functions and activities that gave them significance (Arch2o, 2020). In the case of Beirut, they were imposed on an existing fabric that came in different periods and styles, and some of which was an outcome of a war. Eventually, the identity of these spaces in Beirut and other Arab cities were transformed to become memorials of wars and battles, which was reflected in their new names, such as “Martyr’s Square” in Beirut, Lebanon and “Tahrir (Freedom) Square” in Cairo, Egypt.

**Methodology**

The critical analysis of the literature review deduced that the circumstances that introduced the European public spaces into the Arab world and specifically Beirut, Lebanon were purely political and economic. This resulted in spaces that replicated European standard, but did not take into consideration the social and cultural needs of the city and its people. This satisfies the first objective of the paper that tries to
understand the factors and circumstances that influenced the implementation of public spaces in the Arab context, with the case study of Lebanon. Following this idea, the methodology will draw the way to shed the light on the aftermath of such a process, assessing it, and then taking a look at the social and cultural factors that were completely missing, and identifying their inevitable importance in designing public spaces. This will be studied through a methodology that will be divided into two parts, each dealing with the second and third objectives stated in the introduction respectively. The approach towards satisfying these objectives will serve the sole purpose of the paper into answering the research question and deducing the influential factors for successful design of public spaces.

Firstly, in order to achieve our second objective (Evaluating spaces) of evaluating and assessing the success, or failure, of the European-influenced public spaces in the Arab context, specifically in Beirut, Lebanon, a comparative analysis will be done. This comparison will be between two public spaces, one in Europe and other in Beirut, in which they are aesthetically similar. The approach of having them physically similar allows us, to a certain extent, to remove the aesthetic variable of their success or failure from our comparison. For that purpose, the chosen public spaces are Martyr’s Square in the city centre of Beirut, Lebanon and Piazza del Duomo in Milan, Italy. This study will be based on statistics gained from readings and a personal observation of both spaces, including their use, surrounding functions, and activity within them through the day and night.

Thereafter, in order to satisfy and achieve the third objective (Factors of success) of identifying the factors that have a major role in transforming and domesticating those spaces, we will follow a live example that took place in Beirut, Lebanon in October, 2019. In that date, a very clear transformation took place of the public spaces in Beirut. This event was the Lebanese revolution that reclaimed these public spaces. In order to deduct the factors that played a role in this transformation and its impact on the use of such spaces, a close look and analysis of how this process was made will take place. In that matter, the methodology will analyze three public spaces that witnessed such transformation; with a focus on its social and cultural aspect. These spaces being “The Egg”, Samir Kassir Garden and Martyr’s Square; all located in the city center of Beirut. The analysis will be done through a first-hand spatial analysis of these “public spaces” before and after the Lebanese revolution.

Evaluating spaces
According to UN-Habitat, public spaces in the Arab world covers around 2% of the total area, compared to 12%, on average, in European cities (The Economist, 2016). In Beirut, it makes up around only 0.5% (The Economist, 2016). A main reason for these contrasting percentages is the high density of Beirut that was due to a huge flow of immigration, either from surrounding countries, or internal migrations to the capital. This resulted in a density of 36,185 inhabitants per square kilometres in Beirut (Metrics, 2020) compared to 2,029 inhabitants per square kilometres in Milan, Italy, for example (Comero et al., 2015). Milan also has an area coverage of 12.9% of public spaces (Comero et al., 2015).

Martyrs’ Square is a huge square in the city centre of Beirut, with a significant landmark in its centre, symbolising the long history of struggle towards independence, called The
Martyrs’ Statue. However, this space is now turned into a parking lot, where one can rarely, if ever, see anyone walking or sitting.

To interpret this condition of Martyr’s Square, we will compare it to another square that is similar in its form and aesthetics, which will allow us to solely focus on the variables of those influenced by functional, social and cultural factors. The square in study will be Piazza del Duomo in Milan, Italy. Both squares experienced a historical evolution growing from the city.

The development

However, as Martyrs’ Square dates back to the 18th century, Piazza del Duomo was first created in the 14th century (Niko, 2016). Aesthetically, they both follow a rectangular shape of an approximate similar area, marked by a statue in the middle, and located in the city centre. In Piazza del Duomo, the statue of the first king of Italy, Victor Emanuel II, marks a significant historical monument (Klaos, 2018), like Martyr’s Statue in Beirut. Looking towards the history of construction of the squares, Martyrs’ Square faced a series of battles and wars; later, a 2005 plan of re-designing the public square took place. However, the outcome still failed to revive it (Verdeil et al., 2008). Privatisation also had a major impact on the formation of those spaces. Although part of Piazza del Duomo was privatised due to financial problems, the government was able to set obligation for it to be completed based on the existing plan (Camero et al., 2016). Unlike in Beirut, where the whole area was completely privatised and commissioned to Solidere, with the absence of any governance. This absence was due to the focus of the government on institutional reforms post-war (Verdeil et al., 2008). The outcome of this privatisation could be reflected in the focus on profitability through the upper-class restaurants and shops surrounding it, rather than a focus on the inclusivity and identity of the square itself. This created a space without a clear distinction between what is public and what is private. Such “non-places” lose their symbolic meaning and expression and lack any identity (Arch2o, 2020); to remain only as spaces for the upper-class consumption.

The morphology

Looking at both images below (Figures 5 & 6), we can notice the physical resemblance, however, we can also realize at the first glance the main issue today. Morphologically, in mid-19th century, Martyrs’ Square was considered a hub for public transportation with its strategic location that connects Beirut to its northern side, and with the tramway station located just around its corner. At that time, this was a factor that helped in reviving the square. Besides the coffee shops, restaurants and other shops nourishing its ground floor at the time. Nowadays, the tramway and the shops are gone, and the cars still dominate the scene on the wide streets of its parameters. By that, it looks like a deserted space between the heavy vehicular flow.

Piazza del Duomo is surrounded by homogeneous structures of monumental buildings, such as the Duomo and the Royal Palace, alongside many other prominent buildings such as Galleria Vittorio Emanuele II, Palazzo Carminati and Palazzo Arengario that are also considered touristic attractions (Klaos, 2018). Together, they formed a semi enclosed space that follows the human scale and gives a sense of belonging once inside. What enhances such a feeling, is that the space is surrounded by large arches that create a transition space and act as entrances (Niko, 2016).
This reflects a main issue when looking at Martyrs’ Square in Beirut, where the square’s surroundings were reconstructed in a haphazard manner and with buildings of different scales, styles, and periods. This was either due to the war that kept interrupting development projects, or to the privatisation of lands which did not follow any general planning or policies (Verdeil et al., 2008). This had a huge influence on the feel of the space, it erased the sense of human scale within the space. Also, the heterogeneity of the surrounding facades, in addition to the undefined functions of the buildings, deemed the space to have an undefined physical boundary. Having such a characteristic in a public space erases the sense of belonging and the feel of safety within the space, contrasting with the characteristics of Piazza del Duomo mentioned earlier. At the end of this point, we must take into consideration the relatively newly built “Al Amin Mosque”, which opened in 2005. The mosque is considered a monumental and significant landmark adjacent to the square. However, such landmark did not help in reviving the square, like the Milan Cathedral did, due to several reasons. Some of these reasons are the lack of any historical significance and that it is still being used as a mosque strictly for the Muslim population in the area; unlike the Milan Cathedral which is now a museum for all.

The culture
Eventually, it is worth mentioning that another major influence on the usage of these spaces, are the cultural and environmental factors. The idea of using public squares is essential/pivotal within the daily life of Europeans, due to traditional, religious, and environmental factors. Environmentally, the importance of a public open space in Europe is embraced by the rarity of sunny days, especially in Northern European countries. This allows these spaces to be an opportunity to enjoy those sunny days. This marks another important difference with Middle Eastern countries. On the religious level, privacy, specifically women’s privacy, is sacred in Arab countries due to the influence of the Islamic religion. Therefore, shopping centres and malls usually tend to be more common as they enhance privacy with their enclosed structure (Al-Bishawi et al., 2017). In addition to them being considered more safe and secure; something that public squares failed to provide in Arab cities after the lack of consideration of the local environmental, traditional and religious factors in planning.
Factors of success

The Greek’s agora was created as a representation of democracy, a space for the people, by the people (Arch2o, 2020). A public space is where ideas are shared, memories are conserved and identities are created; it is communal for everyone regardless of class or colour. Architects, planners, and governments are nothing but messengers that provide it for the citizens, who in turn, create this identity within the space (Arch2o, 2020). Due to the huge political and economic influence, the public spaces that were imported into the Arab world did not specifically embrace the needs of the people, as seen in the example of Martyr’s Square. Until 2011, and with the Arab uprising against their governments, the chains shackled around these spaces were finally broken, and the people, rich and poor, took a process to reclaim them as their own (Rabbat, 2012). Taking a look at the Lebanese revolution in 17 October 2019, the upper-class spaces built by Solidere in Beirut’s city centre regained their civic quality; holding intellectual debates and allowing small business and street vendors to use these spaces for the first time. This scene was spread all over Lebanon, reclaiming privatised public spaces, and even neglected inaccessible places. These public spaces in Lebanon shared one thing, a modernist intention inspired by the western movement (Arch2o, 2020), and influenced by political and economic factors rather than social and cultural. However, their weaknesses were backed up by different reasons, which the revolution was partially able to rectify. Once the people were given the opportunity to reclaim these spaces, they were able to domesticate them in a way that fits their actual needs, and reflect their own identity and culture. One reason can be explained through the example of “The Egg”, an egg-shaped building in the city centre that was built with a brutalist vision. It was elevated, and by that, disconnected with its form and style from its surroundings. “The Egg”, as shown in Figures 7 & 8, was built before the war as a theatre; however, it was unfinished due to the outbreak of the 1975 war that left it abandoned and deemed it forbidden from use since then (Sinno, 2020).

![Figure 7. “The Egg” interior, Beirut 2020 (Reuters/Alkis Konstantinidis)](image)

![Figure 8. “The Egg”, Beirut 2020 (by Louay Kabalan)](image)

By the hands of the revolutionaries, “The Egg” was transformed into a centre of expression and acceptance, reflected through art, music and intellectual talks which
included the poor, the rich, men, women, and the LGBTQ community for the first time in decades. Moreover, we can take Samir Kassir Garden as an example, which was highly influenced by western standards in its architectural minimalism. Nonetheless, it remains empty through most, if not all, of the day. The design of this space took care of the small details, it carefully studied visual balance between its three therapeutic elements of the tree, water, and marble to provide a quiet place within a heavy context (AKDN, 2020). By experiencing the space, the reality is different. The space was designed as one elongated bench, overlooking a crowded vehicular street and a hotel/café that is considered for the upper-class. Therefore, the heavy vehicular flow on that facing street refutes its function as a calm and therapeutic space. On another hand, the space lacks any functions for the middle-to-lower class people around it, and the elongated seating layout does not enhance the opportunity for any social interaction. With the revolution, the setting of the space was transformed to an inclusive space for everyone from all classes and races, where people can meet, express their identity, share their thoughts, learn, and grow as a community. It now includes a variety of talks, lectures, and debates. The people were able to restructure the space from an elongated horizontal setting into a circular space, where they can sit and interact, neglecting the initial design, as seen in Figure 10 (Aseel Naamani/International Alert).

Eventually, in the case of Martyrs’ Square in Beirut, the people redesigned the space. Vehicular streets were blocked, making it a pedestrian friendly open space, a safe space for all users, and a symbol of the revolution. These steps were enough to transform Martyrs’ Square into a hub for expression and art. The landmark of the Martyrs’ Statue was revived, in addition to other art pieces built by the people, which enhanced this symbolism. It was full of street vendors and tents for talks and debates, which dealt with political, economic, and social awareness. Moreover, and for the first time, it became a space for common celebrations, marriages and it hosted the 2020’s New Year’s Eve, where the people worked together to celebrate. It was free and open for everyone.

Conclusion
Looking at the findings, and mixing it with the literature review, we can deduct a variety of issues that followed the implementation public spaces in the Arab world, and especially in Lebanon. These spaces that were influenced by the European idea of public space lacked various considerations that create the essence of the public space.
Following the aim of this research into answering the question of whether the circumstances of implementation of the European public spaces in the Arab world were sufficient for their success, and to conclude what other factors that are essential to ensure the success of these public spaces were lacking. The three objectives set worked together to divide the research question into three parts and satisfy each with the example of Beirut, Lebanon. In the literature review, we were able to deduct that the circumstances of implementations were highly influenced by political and economic factors. This was concluded from the following. First, the wars and political sectarianism that dominated the scene of Beirut and Lebanon in general; second, privatisation that led to the aim of profitability with the absence of any governance, leading to upper-class spaces which are not accessible for the lower class; and the lack of any policies or general planning leading to a haphazard reconstructions process. These were backed up in the comparative analysis done between Martyr’s Square and Piazza del Duomo. Also, it was seen that other issues resulted from the previous mentioned factors, such as vehicular dominance, heterogeneity of the space’s surroundings with no significant use of function, and the lack of the feel of safety and belonging that was caused by all these elements.

Eventually, and with the final objective, we were able to prove that once the people are given an opportunity to transform these spaces, the latter takes a leap of success. What was previously missing was the consideration of the human scale and of the society. The political and economic influence of the erection of these spaces lacked the design sensitivity towards creating a space for the people to use, meet and socialise. By that they overpowered the social and cultural factors that should have dominated the intention of these spaces. Similar to the design of public spaces in Europe, where it is believed that public space is where people from all backgrounds gather and interact in a form of self-expression that enables the acceptance of their differences and leads to the formation of a collective identity and vision towards the future (Arch20, 2020).
What Happened to the Public Spaces of the Arab World?

References


Khobar City Plan and the New Public Space in Saudi Arabia

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Abstract
The launch of Khobar’s city plan in 1947 as the first planned city in Saudi Arabia marked a radical shift in local public realm, which changed from pre-industrial organic and intimate public space to one that is car-oriented and formal in its geometry. This study examines the impact of this radical shift by focusing on one particular street, King Khalid street, which was once the bustling urban spine and the public face of the new city of Khobar. Data was collected from multiple sources given the inconsistency in the documentation of the planning and development process of the city. This included relevant popular as well as specialist literature, archival maps, historical photographs, and interviews with local residents who grew up or lived in the city for most of their lives. In addition, brief fieldwork was conducted to assess and examine the current street conditions. In comparison to the desolate current condition of King Khalid street, this study reveals multiple factors which helped to galvanize the exceptional position of this street in the past as a primary public space within a seemingly consistent grid. These factors include accessibility, scale, architectural characteristics, economic offerings, and the general urban experience. The study concludes by discussing ways to revitalize the street based on parallel experiments from the region.

Keywords: Khobar, Saudi Arabia, oil towns, public space, street life

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Introduction
The story started in 1947 when the Arab American Oil Company (Aramco) planned Khobar to provide accessible urban amenities for its expatriate staff, and accommodate the influx of Saudi population coming from other parts of the country to live and work in the nascent oil industry town. Up until that point, there were no planned cities in Saudi Arabia, which had at that time a fragile economic base and a predominately rural population. It can be inferred that Khobar exemplifies “the industrial revolution” of Saudi Arabia.

There is no consistent documentation of the planning and development of King Khalid street or the city of Khobar in general. Thus, our methodology is not orthodox. For lack of archival sources on Khobar, we followed a detective approach where we focused on popular and alternative media, oral stories, news media, and ephemera such as postcards and anything that speaks about the urban experience of Khobar residents. In addition, Khobar first planning process is not well documented, so we resorted to mentions of this process in contemporaneous news reports. In addition, we documented the status quo of King Khalid street by walkabout on-site, experiencing the place first-hand and taking photographs. Overall, we tried to merge popular media with facts on the ground as we saw them.

Specialist literature indicates that Khobar was the first city planning attempt in Saudi Arabia. As such, it was born in a complete regulatory vacuum, with no local precedent or professional regime to inform the planning process (Al-Hathloul and Anis-ur-Rahmaan, 1985, p. 207). The formal grid was simply transplanted “as is” into the landscape of what became the city of Khobar. This astonishingly abrupt urbanization experiment had established a new norm of place making unprecedented in a country that was still deeply rooted in its heritage. Public space, which was once organic, intimate and human-focused became formal and automobile-oriented. The street, which is essentially an automobile path, emerged as the new form of public space. Khobar’s character became the consistency of its grid, and its urban life gradually centred along one particular street; King Khalid street (figures 4&5).

King Khalid street represents the image of the first modernist experiment of new city planning in Saudi Arabia in the post-World War II period. It is characterized by its human scale, mixed land use and medium density. From a design and planning perspective, the street has the physical qualities that promote a lively streetscape and can strengthen the social fabric of the communities around it. On both sides of the one-way street, a new urban scene was staged with new building types, new architectural forms, materials and methods. The street became like a public display of how a modern Saudi city should look like. Other Saudi urban planning projects such as creating the Al-Malaz district in Riyadh in the early 1950s followed the rubric of Khobar (Al-Hathloul and Anis-ur-Rahmaan, 1985, p. 208).

On a social level, King Khalid street is associated with many under-represented oral stories and particularities of the city that are known to local citizens. It was the place to interact with one another intentionally and coincidentally, where street vendors, oud musicians and young children playing football shared the street surface. Despite its original central and accessible location, currently the street situation is deteriorated and suffers from abandonment. The retail shops are empty and plastered with ‘to let’ posters. The quality of buildings is degrading, and on a pleasant evening in December there is no street activity in sight. King Khalid Street is a form of modern
Saudi public space that has been neglected by local municipalities and local retail and is very vulnerable today to being damaged, destroyed and lost (figures 8 & 10).

**Origins of Saudi Arabia’s first city plan**

Looking at the state of the urban settlements in Saudi Arabia at the early 20th century, cities like Riyadh, Jeddah and Hofuf varied in size and location but were similar in their traditional urban form. Characterized by city walls that wrapped around dense clusters of houses and winding paths that centred around mosques and open-air markets, these cities shared a similar language but with distinctive identities. This identity was shaped over time by the climate, local culture and their basic economies. Although oil exploration started as early as 1933 and crude production in 1938, oil production and export witnessed a sharp increase only after World War II. This led to drastic social, economic, and urban changes in the eastern province of Saudi Arabia where Aramco ran its operations. During that period, existing urban conditions were still deeply rooted in their old heritage. The economy was predominantly based on limited agriculture, fishing and pearling. Oil enterprise accelerated economic growth in a quantum leap by a few hundred years. The new mode of industrial development superimposed a twentieth century business on a fifteenth century economy (Farmer, 1959).

This sudden and abrupt disruption of local conditions is best explained by an eyewitness who lived through these changes. Mr Nassir Ajmi, who rose from an oil labourer in 1950 to an Aramco executive decades later, wrote: “I came from the desert. By the age of seven I knew everything that my father knew. I thought that was it, but then you see all the new equipment and machines. It’s not a camel, it’s not a donkey, it’s not a horse, it’s not a sheep, and it’s not a goat. Then your mind begins to tell you that you don’t know everything. You want to know more and that’s how it started.” The sheer scale of change rippled into every aspect of people’s lives (Ajmi, 1995).

Like many of the traditional settlements along the shores of the Arabian Gulf, pre-oil era Khobar was a small fishing site that was occasionally occupied by fishermen. Before 1940, the oases of Hofuf and Qatif were the only major permanent settlements in the Eastern province with more than 10000 inhabitants within a vast desert which remained virtually unpopulated for many centuries (Barth and Quiel, 1986, p. 257). When oil exploration started in 1933, Khobar grew as an oil industry camp site and a marine unloading port for materials and equipment brought to Dhahran oilfield from the nearby island of Bahrain. Soon, Khobar became a small port with a single pier and a movement corridor developed between Khobar and Dhahran, 10 km to the northwest. This corridor was simply a graded road along which small retail and informal settlements developed (figure 1).

Until oil was commercially produced in 1938, internal migration in Saudi Arabia was at its minimum. The pre-oil economic base of Saudi cities could not support high concentration of population. However, oil changed this situation forever, and the attraction of Khobar in particular drew a diverse population from nearby towns, other parts of Saudi Arabia and abroad. In 1934, the small Khobar fishing village had only 75 residents or so. This number multiplied many times in less than two decades to 13000 inhabitants by 1951. The growing city not only provided employment and business opportunities but also lifestyle offerings which could not be found anywhere else in Saudi Arabia at that time (Shuaiby, 1976).
Urbanization of Khobar was not only triggered by the private oil enterprise, but also by public policy. In particular, the government land distribution act of 1939 was instrumental in opening the city for development. According to this act, any Saudi citizen was entitled for a land lease in Khobar awarded by the government free of charge for ten years, but to be developed within two years of receipt (Almulla, 1991, p. 286). Not only Saudi citizens were attracted by this opportunity but also residents of other Gulf countries sought to be naturalised as Saudi citizens in order to acquire land in Khobar (Ham, 1944, p. 70). As a result, internal and external population influx accelerated. In particular, settlement intensified and squatter sites mushroomed around Khobar and oil operations sites in Dhahran. The squatter settlement in Dhahran continued to exist until the mid-1980s (Parssinen & Talib, 1984, p. 14) (figure 2).
The pressure of rapid urbanization and population influx prompted local government of the eastern province to enlist the help of Aramco to produce the first overall plan of Khobar. Aramco’s involvement as a development agent was stipulated in the 1933 concession agreement, which required the Aramco to “carry out public works development.” Aramco, however, avoided engaging in activities with no direct connection to profit, which the company perceived extraneous to its core business (Vitalis, 2007).

Social pressure was also an important factor in accelerating the creation of a new city. In particular, the stark contrast between the all-American gated community of Dhahran and the shanty camps of Arab and other foreign workers reached a tipping point in 1945, when the first worker strikes took place over living conditions and pay (Chalcraft, 2011, p. 38). Although Khobar planning was at the behest of the government, Aramco found it an opportunity to quench its labour workforce demands, and also to project an image of “the public good” agent to the community.
All things considered, Khobar—being not too close and not too far from Dhahran camp—was an ideal location to plan a nearby city that would absorb labour pressure for better living conditions. Not only that but also establishing a new city would relieve Aramco from future development obligations by providing a base for home-grown services in the new city. For this purpose especially, Aramco established “Arab Industrial Development Department,” to support local entrepreneurs and businesses to create public amenities, such as Khobar electric power and water companies which were established in 1951 and 1955 respectively, to name a few (Vitalis, 2007, p. 133). On a larger scale, Aramco established its own home ownership program which provided loans and technical support to its Saudi workforce in several cities including Khobar, in which an urban division called “labour town” was established to the west of King Khalid street (Al Mubarak 1999, p. 40).

**The company town typology and the street as the new public space**

One of the most striking features of Khobar plan is the adoption of a strict gridiron spatial configuration based on a network of streets and city blocks almost entirely identical in terms of scale, with some variations (figure 3). This newly conceived typology of urban space was unprecedented on such a scale in Saudi Arabia, whose cities maintained - up until that point - a predominantly traditional urban fabric. For the first time, public realm changed from traditional pedestrian-focused, condensed urban spaces, such as squares (Arabic: maydan), linked by alleyways to a landmark or a market, to linear and extended thoroughfares dominated by car movement. There is no clear explanation, however, as to why the grid was adopted as the framework for Khobar, which Aramco surveyors devised in 1947 (Al-Hathloul and Ansari-ur-Rahmaan, 1985, p. 206). An answer could be interpreted from prior urban experiments of oil industry in other places of the world. Before venturing to Saudi Arabia, the founding companies of Aramco, such as Standard Oil of California and Texaco had already established oil industry in Mexico and South America where they developed their policies and understanding of working in farther frontiers within different cultural contexts. In fact, the first generation of Aramco American pioneers came from the oil fields in South America where the exclusive company town typology vs. separate accommodation for local workforce was the norm (Abrams, 1966; Vitalis, 2007, p. 54).

The urban planning model that Aramco established in Dhahran and Khobar is not different from the company towns built by American oil companies in North and South America, which in themselves went through several cycles of development (Croly, 2014). The post-World-War II iteration of the American company town included two or three distinct forms of urbanism that are designed differently to serve different communities. The first form of urbanism is a district for senior staff, characterized by detached townhouses with large gardens, lush landscapes and wide undulating streets that resemble the Garden City movement in the UK and post-war American suburban neighbourhoods (Crawford, 1995). This is then juxtaposed with rectilinear grids and dense neighbourhoods for junior, local or low-skilled staff.
The roots of this spatial segregation go back to colonial urbanism practices linked to extraction industry, such as in remote mining sites (Fuccaro, 2013). Adoption of the grid could be interpreted as a means to maximize efficiency of construction methods and building materials consumption (Correa, 2016). Indeed, Khobar was a completely flat “tabula rasa” situation where a transplant of a tried and tested typology was a comfortable choice for Aramco, given the lack of any direct local precedent or standards.

On the other hand, for Saudi Arabia, the introduction of the grid was a radical departure from the common urban experience of the time, which was still rooted in the pre-industrial organic form. A city-wide network of perpendicular streets emerged as a substitute to the condensed and human-oriented traditional public space. The shifts were not only configurational, but also functional. The new city grid was devised based on the assumption that car will be the primary means of transport. Consequently, land use and urban functions were spread out across the plan in designated areas, in line with the modernist planning ideals of the post-war period. This deterministic approach and the focus on separation of uses characterized the new and emerging Khobar (Lesnikowski, 1982).

Despite some of the pitfalls of Khobar Cartesian street grid, its effect presented a new way of creating urban realm through “standards.” Aramco planners of Khobar worked in complete regularity vacuum. There were no local street or design standards to use, nor was there a professional practice environment to be a “guiding hand” for the planning effort. Thus, the impact of Khobar planning was compounded not only because it was unprecedented, but also it would later be taken as a basis for planning other Saudi cities.

The introduction of these standards for the first time might seem benign, but in fact their effect is enormous on place-making in future Saudi Arabia. Simple dimensions for minimum street width, sidewalks, or planting strips may seem now unremarkable. However, in the case of Khobar, these urban features were not practiced at the time. Not only that, but their scale was overwhelming as they were applied to miles of streets and many city blocks occupied by thousands of people. These standards delineated the
urban and architectural character of Khobar, and had a decisive impact on the way it looked, felt, and worked for its inhabitants and visitors (Southworth and Ben-Joseph, 2003).

The layout of Khobar blocks was not the only outcome of following the newly introduced standards, but the voids of the streets were also sculpted by the prescribed terms and conditions of these standards. Street facades, scale, environmental response and overall architectural character were all the outcome of the application of these repetitive standards. The grid meant that Khobar streets are generally straight and meet each other at right-angles. The original plan of Khobar had about 293 street intersections. The vast majority of streets (over 90%) are 10-15 meter wide. A small minority of streets falls below 10 meters in width. There are a few arterial streets, which can be as wide as 18 to 20 meters. They connect with major inter-urban roads to Dammam and Dhahran (Shuaiby, 1976, p. 211).

**King Khalid street as the new urban core**

Although Khobar’s grid might seem geometrically orthodox on an abstract level, in reality it took a lot of qualities from the organic urban settlements which previously existed in the region. The formal rectilinear framework had multiple dynamic variables which changed over time and established micro-urban areas within the larger grid. Variables pertinent to the environment, real estate, governance, traffic and population movement patterns, to name a few, added extra layers which differentiated the seemingly consistent grid.

As an example of this differentiation process, King Khalid street is recognized as a key public space in the modern landscape of Khobar. It held high urban and cultural significance in the local social memory to the degree that it was often labelled “the Champs-Elysees of Saudi Arabia” (Al-Madani, 1991). It was the city’s public promenade of choice where it hosted parades for several Saudi monarchs since the early 1950s. Having been lined with local and international shop fronts, the street established itself for half a century as a major destination for commerce and retail in the city and the wider region, and as a dynamic public space with a vibrant social life (figures 4 and 5).

Local narratives are rich in delineating an intimate narrative of the rise of public life on King Khalid street. For instance, Younis Al-Hawwa, a jewellery business owner who worked on the street for the past fifty years, stated in a TV interview that although the city of Khobar was small with limited population size, merchants moved from Bahrain to Khobar in the 1960s to establish their shops in this street (Al-Hawwa, 2019). These merchants included families such as Al-Hashimi, Al-Kohaji, Khaja, Kanoo, Alfhaimi and others. They opened supermarkets, pharmacies, bookstores and jewellery stores on King Khalid Street.

Indeed, such anecdotes from the community’s collective memory suggests that King Khalid street is one of the important historic places in Khobar, if not the most important one. This was captured in ephemera, such as postcards produced locally in the 60’s and 70’s, and currently in press and social media. This is most visible in Journal articles by local historians, such as Abdullah Al-Madani who wrote a weekly column on the history of King Khalid street in Alyaum newspaper (Al-Madani, 2017).
Figure 4. King Khalid street in 1954 showing architectural language still rooted in its traditional past
(Source: Aramco)

Figure 5. King Khalid Street in the 1960s with new architectural forms and building materials.
(Source: Aramco)
In another work, the same author expands on the past life of King Khalid street as “the city’s beating heart and the centre of its financial and commercial activity and the meeting point for those coming from other cities to shop.” Along the street, there are hundreds of shops, banks, offices, and restaurants where you can buy things as big as a car, or as small as shawarma (a local type of sandwich) (Al-Madani, 1991). Similar urban nostalgia is also apparent in other Gulf oil towns such as Al-Ahmadi in Kuwait which was established in 1947 (Alissa, 2013, p. 43). Al-Ahmadi differs from Khobar in that it was built, in the middle of the desert, as a satellite to Kuwait City. Al-Ahmadi was also planned as a composite town that included three tiers of urban design in one town; for senior staff, skilled workers and local workers. However, it holds the same popularity that King Khalid street does among its former residents. Nostalgia in the community’s collective memory is not only a reflection of how people felt about the conditions of the past, but also a reflection of how people feel about the current situation. Among the conversations with former residents and retailers in Khobar, the praise of the street’s vitality and active public life is consistently contrasted with the degraded conditions of the present.

Listening to these animated stories about an exceptionally successful public space from one side and observing its current state from another side prompts posing several questions. For instance, when and how the street started to develop as the urban core of Khobar. Also, what does it represent in the wider context of the city? Were any design features linked to the performance of the street? And why did this street in particular represent an image of the city’s modern heritage?

In order to understand the value of King Khalid street, these questions should be considered from a spatio-temporal perspective. In the past, the street enjoyed excellent accessibility as it sat at the centre of Khobar (Northern Khobar today). The distance from King Khalid street to the coast was half of what it is today. It was the fourth street inland running parallel to the coastline before the spread of sea reclamation projects since the 1960’s. This close proximity to the sea and the now-defunct port, which was within a ten-minute walking catchment gave the street an accessible and desirable location. The pier was the main point of access for goods and passengers from Bahrain and other countries.

This ease of access was coupled with the continuous and staggering demand on urban services and experiences. For example, for oil company staff coming into Dhahran from Bahrain, King Khalid street was a middle ground and an ideal urban hub for hotels, food outlets and other offerings. Proximity to regional destinations, such as Bahrain, Dammam, Qatif and Ahsa added to the ecosystem of trade, as it wasn’t far from other economic and agricultural hubs. Aramco and its foreign employees and their families and visitors added to the diverse demand on retail and hospitality and allowed the local economy to flourish.

As part of a larger grid, King Khalid street shared a lot of configurational similarities with other streets nearby, but there are subtle morphological differences that played a role in allowing it to become an iconic public space. King Khalid street is approximately twenty meters wide. This is wider than most streets in Khobar, which ranged between ten and fifteen meters in width. Also the small scale of the short city blocks, which define both sides of the street, allow more permeability and comfortable pedestrian movement. This is right on the mark of how Jane Jacobs once described successful urban fabric: “frequent streets and short blocks are valuable because of the fabric of
intricate cross-use that they permit among the users of a city neighbourhood” (Jacobs, 1993).
Moreover, the spatial proportioning of the street can be described as ideal. Street section dimensions are not too wide in relation to building heights, so pedestrians, trees, and retail frontages are sharing the same space, while enjoying passive shade from adjoining buildings that define the street façades. The soft landscape formed another street hallmark, as it was lined with local street trees at regular intervals, unlike other streets in the area, giving it a distinct character and more shade during the day. The extra width of five meters that differentiated it was enough to allow for street trees along both sides of the footpath, while still maintaining a comfortable pedestrian path with spill-out from restaurants and cafes. The effect of trees on image and public perception and beauty is important to consider. Overall, the planted trees provided a diverse range of social, economic and environmental values to the street.
The burgeoning of new architectural language in the street was one of the first signs of the economic growth in the early days of Khobar (figures 4&5). During the 1930s and 1940s, the tectonic culture was still connected to its traditional past. This could be seen in some buildings which survived well into the 1950s, such as the first state school, which started in a rented house that displayed construction methods and materials, distinctive of the Eastern province architectural heritage. By the early 1950s, serious changes started to take place in infrastructure and technology. Mechanization of the building industry grew especially after Khobar Electric Power company started operation circa 1953, and provided power to the nascent construction industry (Al-Dossary, 2001).
In addition to newly introduced building materials, the homogenizing power of the standardized grid not only shaped streets and city blocks but also played a major role in the development of the new architecture in Khobar. The availability of new materials and new construction methods and techniques influenced architectural form. Not to forget that foreign expertise played a major role in transferring architectural practice to Khobar which was a fertile ground for it.
These spatial and architectural traits were essential to create an urban spine and a public space that functioned as a platform upon which the collective memory was inscribed. King Khalid street is considered a part of people’s own heritage. It is linked to the thriving days of Khobar and its evolution. These are a few reasons that demonstrate the significance of this street from a public space perspective. Having design features that are human-centred and resemble globally successful and well-loved streets around the world show that it is also of value from an urban design perspective and could have been a model for new Saudi streets.

**Current situation: rise and fall**
There are clear economic factors that are part of King Khalid street’s decline which this paper will only identify but without examining in depth. For example, competition from large-scale shopping malls, shifts in consumer experience preferences and new labour policies which drove some expatriate workforce out of the market. There is also a limited supply and variety of residential units in the area which lead to urban sprawl. In addition, the shift in traffic and highway systems affected the original configuration of King Khalid Street within the wider city mobility network and shifted its previously central position to a marginal one.
Due to significant gaps in historical data, a qualitative study of a section of the street is presented here. The aim is to understand its historical character and growth process vs. how it currently performs. The study area is focused on the first segment of King Khalid street, stretching from The Custodian of the Two Holy Mosques Road (Formerly, Dhahran road) to Fourth street. In particular, two key points will be examined. First to be looked at is the intersection with the arterial Dhahran road, which was the main entrance to King Khalid street. Second to be examined is the block from "A Street" to First Street, which includes Kaki and Aldugaither buildings, where most of the retail activity occurred in the past. (Figure 6).

At the prime of King Khalid street’s public life, during the 1960s and 1970s, the city of Khobar consisted of the newly formed grid which is where its entire population lived. However, the fact that that area is referred to now as Northern Khobar alludes to the fact that the city has expanded to the south, and in fact in all directions. The local population no longer lives in the area around King Khalid street as was the case before. This is an important factor relevant to the deteriorated conditions of the street today. Although Khobar and King Khalid street were designed for the car and around a formal network of streets, it wasn’t designed entirely for that means of transportation. It relied heavily on a thriving local population that lived on the street or within walking distance. The disappearance of this residential population is one of the primary challenges that lead to the street losing its footfall and consequently losing its vitality as a public space.

The point where King Khalid street intersects with Dhahran road was an important spatial node in the city as it connects Dhahran road as the primary functioning route (industry, oil, economy) to King Khalid street as the secondary route (leisure, retail). This was celebrated in the earlier plans with a green roundabout (figure 7). Dhahran road itself provided the regional connectivity as the first arterial road built in Khobar. As a straight route connecting Khobar pier to Dhahran oil fields, it embodies the narrative of the city and the reason it exists in the way that it does today. The greenery in the roundabout offers a visual link with the street trees along Khalid street as they seem to be from the same tree species, announcing to passers-by and vehicles that King Khalid street is a destination and a place to go to. This urban scene from the past is confirmed by contemporaneous residents of Khobar (Farran, 2019).

Over the last fifty years, this intersection has been redesigned and reconfigured to accommodate the changes and expansion of Dhahran Road. Comparing archival visual material with the current situation, it can be seen that the roundabout was demolished and substituted with a linear green park within the right-of-way, centred in the middle of Dhahran Road (figure 6&7). This remained till the 1980’s which gave consistency to the boulevard character of the road and provided significant urban greenery to the city of Khobar. However, as Dhahran Road widened, the lanes expanded, and the speed limits increased. The linear green park became isolated in the middle of six lanes, with three lanes on each side and very few street crossings. Eventually more road works occurred on Dhahran Road leading to increased scale (and speed) as a major highway with twelve lanes, a tunnel, and no greenery nor space for pedestrians or cyclists. This shift in scale changed the relationship it had with the contrasting, and much narrower, King Khalid street. Today the intersection includes a higher proportion of road surface to footpaths than it did in the past, and there is no greenery or any shade. It is safe to say by looking at the current condition that the ratio of green to hard surfaces has decreased significantly.
Figure 6. Study area along King Khalid street, within the original Khobar city grid of 1947 including intersections from 'Street A' to '4th street' (source: Author based on Google Earth image)
There has been an attempt by Khobar Municipality to refurbish the area using new paving in 2010 (Farran, 2019). However, that was only a cosmetic treatment which could not alone create positive change (figure 8). It may have also differentiated between some of the buildings (deteriorating) and the public realm (renewed) which results in a fragmented street. Today almost ten years after the refurbishment initiative the street is suffering from economic regression, with a high percentage of vacant retail spaces and shop fronts with signs for rent. On a tactical level, this intersection was paved with interlock concrete tiles in varying colours, on both street and footpath surfaces. This effort is a cost-effective way to mimic cobbled streets. It resembles the global trend of ‘shared streets’ where the surface is shared amongst all users, including pedestrians, cyclists, and vehicles. This trend aims to equalize the hierarchy of the street by not giving priority to vehicle-drivers as it is currently the case in the neighbourhood and the region.

However, on a micro design level, the difference in the intervention here is that kerbs are still higher than the thoroughfare, there is a high number of bollards along the footpath which indicates that vehicles are dangerous and need to be protected from. This indirectly signals to motorists that speeding is accepted and perhaps even encouraged. These attempts remain tactical and on the surface. They don’t resolve the profound strategic changes which affected how the street functions within the wider urban ecosystem.

The second point of examination is the first block between A and First streets. In terms of urban landmarks, that segment is home to Kaki Buildings on both sides of the street.
The Makkah-based merchant brothers Siraj and Sadaka Kaki acquired the land in an auction in the 1950s, and then started the first factory of cement blocks in the city of Khobar in 1954 to construct their new buildings. The buildings were initially developed as mixed-use multi-storey buildings with predominantly retail spaces, but then expanded to include an extra residential floor. The block also includes Aldughaither Building, another mixed-use plot developed by businessman Saud Aldugaither following the lead of Kaki family (Al-Madani, 1991).

The timeline photographs (figure 9) show the street evolution with a series of images taken from approximately the same vintage point. Starting from 1963, when the street was still in its infant years, we see the Kaki buildings as the main elements in the photograph. The thoroughfare is wide and laid with asphalt with no street markings. There are young trees lining the footpath that are roughly 3-4 meters high. Tall streetlights are placed every 10 metres and go up to six metres high. Signage is small and proportionate to shop fronts.

Comparatively, in the following photograph of 1968, the same view has matured and appears to be busier with a higher number of vehicles. There is a new light signal system hanging in the middle of the street which was not visible in the photo from five years ago. The trees have grown slightly in size and the middle building on the left side has been transformed into a hotel. Street life is more vibrant with a few visible vendors on the pavement. There are small interventions for thermal comfort, such as shop awnings and canopies signalling to more pedestrian activity. International trademarks and brands appear here such as the Coca Cola sign.

Third photograph shows the same view in 1974. The trees are significantly larger and have thick canopies that would provide substantial shade. The shops seem to all have awnings and shade canopies. There is heavy pedestrian activity and a group of people walking in the middle of the street indicating that vehicle speeding would have not been high.
The last photograph of the timeline shows the view in 1986 and a very different image of the street. The buildings are roughly the same in structure but have a much higher coverage of retail brands, advertisements and signs. Here we see the beginnings of a departure from the previous character in that the trees have been removed as well as a large number of shop awnings. The street has been furnished with a new scheme of street lighting including two types of white pedestrian light fixtures, one with round lights and the other with European-style lights. Shop signs have also been replaced by predominantly backlit signs.

Today the same block is quiet and empty. Many shops have no tenants. Architecture is derelict and, in some cases, falling apart (figure 10). Street lights have once again been changed and their height and orientation is focused on the road only and not the footpaths. There are no longer any shop awnings or street trees or any form of vegetation. Alleyways between the buildings are devoid of any human-scale features other than a selection of fixed concrete benches that are fixed to the ground.

Traditional shop fronts form a significant part of the architectural heritage in Khobar.

**Revitalization strategies**

The growth of King Khalid street reveals the impact of multitude of socio-economic changes fuelled by the “magic touch” of oil (Fuccaro, 2013, p. 4). At present, this rise to prominence came to a halt, although King Khalid street has high potential for urban renewal and revitalisation.
This section will discuss revitalization in the local context within Khobar, the differences between revitalization and gentrification, and then will look at the pros and cons of some methods and examples where this has been done in the past.

Today the term “urban revitalization” is used to describe a process that includes social and economic improvements in urban conservation planning. The main idea is that it is an integrative planning process that includes policy, urban design, heritage preservation and social and economic planning. It aims to address urban issues such as economic decline, architectural and environmental decay, community dereliction and social issues. It is usually an incremental process and happens largely through public effort, or public-private partnerships. For a small town like Khobar, this can bring several benefits such as efficient utilisation of existing urban infrastructure, reducing sprawl, providing more jobs in the city centre, attracting tourism, and providing a rich historic narrative that is diverse, authentic and unique to the city. Regeneration projects that set clear delivery or efficiency targets can also offer more positive outcomes (Mazzetto, 2018, p. 3).

It also must be clear that urban revitalization is not only a process of upgrading the physical surface of a place, but also ensuring social and economic viability. There are many ad-hoc examples in Saudi Arabia and in Khobar that include efforts of upgrading the physical area to give the impression of positive change, such as the use of graffiti art in the oldest part of Khobar, Subekhah, in 2018 (Al-Fawaz, 2018). While this may work in some examples of tactical urbanism, it is rarely enough to solve strategic urban problems such as a hollow city centre. It also creates an attraction for visitors to the area without necessarily improving the conditions for the local residents themselves. To ensure holistic urban revitalization for King Khalid street it must become both a home for a real diverse population living in the area and a destination for another population visiting for retail and cultural purposes, but not one without the other.

The second example of revitalization in the region is the Muharraq Pearling Path in Bahrain which is similar to King Khalid street in the sense that it represents a heritage narrative for the city and an economic industry which has been manifested in the urban
Fabric. For Bahrain, Muharraq is home to the pearling industry that declined in 1930’s after the discovery of cultured pearls, whereas Khobar is the home of the oil industry and its beginnings in 1940s and 1950s. The revitalization of Muharraq is still ongoing. It is taking a positive phased approach that involves different stages and grows slowly over time with the communities within it. The preservation and rehabilitation of the buildings serves as a good precedent in the region. Another benefit from this case study is that it is facilitated by a model of public and private partnerships that also engages with the relevant local families and landowners in the area. Some of the problems with this project so far is mostly related to design quality as the way-finding and signage is not clear, some of the urban plazas have low quality features including unhealthy trees. Lastly it is not clear if the local community was involved and engaged in the design and planning process. The project recently won the Agha Khan prize for Architecture in the 2017-2019 cycle (Aga Khan Development Network, no date).

On the other hand, a vision for revitalization can be seen in the third example of Al-Ahmadi town in Kuwait. Ahmadi is a centralised town that was established, owned and for a while run by the Kuwait Oil Company (KOC). A higher sense of centralised planning and development still exists to this date. For example, any modifications to the built form from the 1940s-1970s were not allowed without the company’s permission. After 1975, the management of the company changed and has been turning a blind eye to the illegal expansions happening and illegal subletting which has had a negative impact on the architectural and urban form of the town as a whole (Alissa, 2013, p. 56). These expansions and changes are understandable as they reflect a desire from the new Kuwaiti residents to architecturally 'upgrade' their homes and facilities to meet Kuwaiti needs rather than British or foreign expatriates needs, such as introducing ‘diwaniyat’ (reception rooms for men social gatherings) outside the front of their houses. Currently, KOC is developing a master plan titled the Ahmadi Township Redevelopment, in which it aims to set a comprehensive plan for redevelopment through preserving Ahmadi’s architectural and urban heritage while also providing the living conditions that the contemporary Kuwaiti population needs, and therefore fixing the problems faced by local residents in recent years (Alissa, 2013, p. 58). The challenge in revitalization is more than restoring and rebuilding the physical fabric of cities. It is to provide a thriving and diverse local economy in the centre of Khobar that is viable and can serve a diverse socio-economic community. It is important in the case of King Khalid street not to cause displacement within the local Saudi population. As there is a lack of data at this stage of the research about the number of residential population and their socio-economic backgrounds, it is only possible to describe the principles and goals without quantifying residents and their rent value. Further surveys will be needed to gain more information if the lack of quantitative data persists.

Conclusion
Creation of Khobar was a radical shift in public space making in Saudi Arabia. In terms of urban design, the list of the “first off” creations in Khobar goes long. Application of design standards, creation of infrastructure grids, introducing new building types, popularising new building forms and materials are just some of the many innovations. All of these precedents would cast their shadows on city planning in Saudi Arabia for generations to come. With the power of a booming oil industry, the rapid development
of Khobar was the product of several factors working in concert such as foreign investment, imported expertise, local demand and urbanization. Its street grid was nothing short of a striking contrast to the local tradition. After the plan was launched in 1947, Khobar assumed the role of the local counterpart to the typical company town typology which developed in North and South America over the past two centuries. The contemporaneous regional company towns, such as Al-Ahmadi in Kuwait, maintained a lot of similarity with the typical company town form, which is characterized by composite footprint and agglomeration of different urban grid types in one place. Khobar, however, was different. The composite plan of a typical company town was deconstructed into separate public and private urban grids. Khobar public grid became a city that is open for all and free from the control of the founding company, which in the case of Aramco kept a separate and exclusive suburban-like campus at a safe distance in Dhahran.

Until Khobar became a thriving new city, the idea of a modern and cosmopolitan public space in Saudi Arabia was a feature that can only be found in established cities abroad. King Khalid street scored that high note until it became known locally as “the Champs-Elysees of Saudi Arabia.” Its current condition might not help to draw that conclusion but the passionate local narrative and the special place this street has in the public memory paint an image of a lively, liveable, equitable and accessible public space for all. The gradual decline of King Khalid street is a compound result of fundamental social, economic and urban changes, which disrupted and still continue to disrupt the city structure. By simply looking back at the past life of this street as opposed to its condition today, one can only see a greatly missed opportunity. There is no reasonable future outlook at this stage but to learn how to regenerate.

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References


VIEWPOINT

Public Spaces in the Arab Region
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Abstract
The Arab Region has been facing several challenges. While some countries are facing socio-economic issues, others have been civil strife and conflict. In both cases, public spaces play an important role in tackling these issues, and in cities’ social, economic, health and environmental life, since they contribute to build social cohesion, improve the quality of human interactions and the physical and mental health of inhabitants. Based on this, UN-Habitat has been supporting the development of ‘Public Spaces in the Arab Region’ programme since 2016. The programme has been rehabilitating public spaces using participatory tools to foster sustainable development and ultimately achieve SDG 11, target 11.7.
However, the implementation of these siloed projects, coupled with lack of data, inadequate design and improper management didn’t allow for the development of a strategic plan for public spaces in the cities of the Arab Region. Acknowledging such issues and challenges, the programme in cooperation with the UN-Habitat’s Global Public Space programme is further developing the regional approach to focus on rehabilitating public spaces that are safe for the most vulnerable groups, in particular women and girls, given the violence they face in the public domain. The programme is also working with relevant stakeholders and authorities to upscale such projects and to develop a city-wide public space network that is aligned with a strategic action plan.

Keywords: Arab Region, COVID response, urbanisation, public spaces, VAWG

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Introduction

‘Public spaces are all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive. Public spaces are a key element of individual and social well-being, the places of a community’s collective life, expressions of the diversity of their common, natural and cultural richness and a foundation of their identity.’

During the 23rd Governing Council the member states mandated UN-Habitat to address issues of public space and to include it in its overall agenda to improve the quality of life in cities and to pursue sustainable urban development. In addition, target 11.7 of the Sustainable Development Goal 11 (“Making cities and human settlements inclusive, safe, resilient and sustainable”) refers directly to public space: “By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, elderly, and persons with disabilities.”

UN-Habitat’s is mandated to advance the agenda on public spaces and placemaking, implement public space projects that encourage the participation of the vulnerable groups like women, youth, elderly and children and use these experiences to disseminate the further practical knowledge on public spaces and their implementation.

Challenges in the Arab Region

The Arab Region is diverse in nature; geographically divided into the Gulf countries, Mashreq countries, Maghreb and Egypt and Sudan. Though there are common issues that were highlighted since 2011, there are still some context specific issues. For example, looking into the Gulf countries, their approach to urban planning has been highly influenced by Western planning methods which didn’t enforce user friendly spaces; but rather planning that is based on one mode for mobility (cars). Through the years, public spaces in the Arab Region like the rest of the world were affected by the push of the planners and authorities for land for housing and other land uses rather than allocating land to open spaces.

The Arab Region’s institutional structure has long been debated. The challenges facing the governing systems and the planning regulations have been thoroughly analysed in literature. Most of the countries face similar issues of rapid urbanization, the imbalance between supply and demand of housing, land budgeting and urban planning regulations that leaves little land for public spaces in order to accommodate the rapid urbanization, the mis-location and pricing of housing which partially contributes to informal settlements, land prices speculation and internal migrations to cities. A full loop of issues and challenges that require more than just regulations to fix it but rather a paradigm change in how cities are managed. Topping this with the fact that the centralised financial instruments placed within the governments still struggle to maintain the expenses and burdens of providing basic urban services to a rapidly increasing population.

Since 2011, and after the Arab Spring, public spaces have gained an important position in the Region. The events within the region have given public spaces a politicized stance. Furthermore, international agencies acknowledged that public spaces play vital roles to the community. Public Spaces in cities enhance social cohesion, improves quality of life and is a first step towards civic and economic empowerment. It opens opportunities for greater institutional and political engagement. Public space contributes to well maintained, healthy and safe urban environments, making the city an attractive place to
live and work for everyone. Also, moving away from main cities, peri urban and rural areas have different sets of community dynamics and are governed by different sets of norms and traditions and might often not have public spaces in the traditional sense. In peri urban and rural areas, communities do establish “public” spaces that they collectively used for celebrations and major spiritual events or markets. The lands allocated for public use are usually donated from the community or the owners are substituted with other lands within the city/village. These issues forcefully place pressures on the government to prioritize a certain set of issues over matters relating to public spaces.
Moreover, these issues are being resolved by relatively outdated laws and mechanisms in planning. Coupled with this, the lack of clear governance systems and slow response to pressing urban issues and most recently the global challenges that pressures countries to swiftly act and push laws and regulations to combat global issues like climate change, economic crises and lately the global pandemic COVID 19.

Public Spaces in the Arab Region

Public Spaces are a non-commodified urban common, free to use by the different communities. Urban commons typologies’ have been blurred with time hindering the ability of communities to take advantage of them and utilize them for the betterment of their lives. Public spaces have several typologies that not everyone is aware of. Public spaces are open spaces like the beaches, waterfronts, avenues, markets, sidewalks, parks, libraries and civic centres. Most countries in the region invest in libraries, civic centres, public markets (esp. those with significant heritage or cultural value). Most of the countries in the Region are more receptive to investing in public spaces yet financing remains an issue. UN-Habitat has worked with different countries around the Region to rehabilitate public spaces; mitigating social and spatial issues and advising on the needed interventions to enhance the public realm.
Throughout the years and with the increase of the influence of privatization and the changes within the urban development regulations in the Region, communities grew and morphed and became more reliant on the term of “private public spaces” as means to enforce power over the space, and deny the right of citizens to use public spaces; while generally, others like stores within downtown central districts have used public spaces as their own property and have expanded their businesses, limiting the usage of public space to other community members. This resulted in spatial and socio-economic inequalities that established itself in the mindset of the communities. Furthermore, the Arab Region still faces other challenges beyond privatization like lack of accessibility to basic urban services which can be noticed in impoverished areas and private gated communities alike due to the rapid urbanization in the Region. The Region also struggles with poor financial managements, violence against women and girls, outdated planning regulations, lack of data on urban topics like informal settlements expansions, ill consideration of women rights, etc. These issues combined with the lack of enforcement of laws limiting such informal extensions and expansions on public spaces, the lack of safety for women, youth and the elderly in public space and the inefficient use of spaces or maintenance has all allowed for public spaces in the Arab Region to be frowned upon and contributed to the expansion and popularity of creating private spaces that is exclusive for certain members of the communities like private sporting
clubs, gated communities, privatized beaches, etc. These issues influenced local and national authorities' view of public spaces and the method in which they plan for Public Spaces. However, as their role dictates implementing upgrading projects in impoverished areas, public spaces would be rehabilitated in terms of repaving streets, and the sidewalks, greening the streets, and rehabilitating open spaces which in many cases remains closed or operates at a time where people are at work and won’t benefit from it.

However, small silo-ed interventions remain an issue for urban development. Urban development agencies are becoming more inclined towards implementing multi-sectoral projects that can be replicated and upscaled and influence national strategies and policies. Part of what public spaces offer to such an approach is its adaptability to include different intersectoral solutions for the community through the different tools and approaches like city wide public space assessments, MineCraft, Kobo toolbox, etc.

**UN-Habitat’s work in the Arab Region**

UN-Habitat’s work in the Arab Region has been aiming towards rehabilitating public spaces that can influence the national urban policies. In order to achieve this, the Global and Regional Public Space programme have implemented pilot projects to demonstrate and prove the ability of public spaces to be a common ground for communities, provide climatic solutions and enhance the socio-economic states of neighbourhoods making them more viable and liveable and moving away from the negative politicized connotations. Countries within the Region are recognizing the importance of having a city-wide plan for public spaces. This has led them to plan to conduct city wide assessments with the aim of rectifying the state of public spaces in their respective countries. Having a city-wide assessment provides governments with a guideline and a base for developing strategic plans for public spaces rehabilitation within the city. City wide assessment looks into the accessibility of public spaces, quantity and its distribution to provide a benchmark against which improvements can be measured. This particularly is important in meeting local targets, and monitoring the implementation of SDG 11.7, existing network to identify enablers and barriers for connectivity and linkages, usage, comfort and safety amongst other things. The process of developing such an assessment is flexible enough to take into consideration context specific issues and challenges; leading to develop comprehensive and implementable city-wide public space strategies and policies.

UN-Habitat approaches such projects, assessments and public space inventories using participatory tools. For the city-wide assessment, UN-Habitat employs Kobo tool box while also using MineCraft for public space designs. Kobo toolbox is a digital tool that is based on structured questionnaire that can be modified to fit any context as well as assess the priorities for any city. Based on the questionnaire and the needs of the city, the output of such tool is a GIS map that highlights the quality of spaces, its provision, ownership, etc and other factors that the stakeholders deem important and needs to be taken into consideration.

Currently, public spaces have been the focus on many of the countries in the Region given the versatility it has shown with the rise of the pandemic. Public spaces regained its importance as a key component for the citizen’s safety and wellbeing. With the lockdown, public spaces provided the community with much needed space for
destressing emotionally. Although this was highly recognised, some issues with public spaces remain un-tackled and in particular safety for women and girls. Many countries embarked on adding WASH kits for the impoverished communities within these common public spaces. UN-Habitat across the Region supported the local authorities in mitigating the effects of the pandemic and implemented projects that rehabilitated much needed spaces while providing them with water and sanitation connections.

In Palestine and in cooperation with its national and international counterparts, UN-Habitat have intervened in Bethlehem to support the users of Public Spaces in being more aware of their personal health, safety and hygiene. Bethlehem is one of the touristic areas in Palestine. The project also aims to provide informative instructions on how to use public spaces and public transportation in order to reduce the chance of getting infected. UN-Habitat also disinfected and sterilized 19 crowded/ main public spaces and solid waste management collection points in Bethlehem. The spaces selection was based on the needs and priorities presented by the local authorities. Moreover, the project installed physical sanitation and hygiene units (while taking into consideration the safety measures on minimal contact). The selection of the locations was based on the findings of the audit surveys conducted by UN-Habitat.

Case Studies

Looking into Egypt, the government has been preserving significant architectural and urban elements. The city has witnessed several political and socio-economic changes. This could be clearly seen throughout Cairo in different neighbourhoods but most significantly in Cairo’s central business district (Downtown Cairo).

The neighbourhood represents all the political and socio-economic changes that the country has gone through. It hosts valuable historic urban and architectural units. It is important to point out that when the neighbourhood was designed (following Hausmann’s approach), it was intended to have several public spaces and villas; aiming at hosting the royal family (Abdeen Presidential palace that is now Cairo’s government headquarters) and most affluent families. Moreover, the district is architecturally rich with buildings from different international architects and different styles. Given its importance, there have been several actions taken by the government to rehabilitate the neighbourhood. UN-Habitat with the assistance of the government, have developed a strategic plan to revitalise the neighbourhood with focus on rehabilitating public spaces; by conducting a neighbourhood-wide public space assessment. The assessment took into consideration the quality, connectivity, and importance of the different public spaces in alignment with the strategic plan for the district. UN-Habitat formed a strategy with an objective of “creating and enhancing a legible public space and movement network that connects the main public spaces, destinations and landmarks; and to create a network of new green space and open spaces”. UN-Habitat then, rehabilitated one of the public spaces- Abdeen square. The plaza or square lies in front of Abdeen Palace -the royal palace- that once hosted the Khedive. The rehabilitation transformed the square from a parking lot to an inclusive, accessible and green public space. The design of Abdeen Square also ensured the adaptation of measures supportive of walking and cycling, and landscape elements to ensure safety for all ages (pathways circulation – ground-cover transitions and lighting.
In Tunisia, in cooperation with the municipality of Midoun in Djerba Island and through a NGO (Tunaruz), UN-Habitat have rehabilitated a public space in an impoverished area called Oulad Omar. The public space existed within a residential area and was being used for illicit behaviour. UN-Habitat and the NGO engaged the different community members in a participatory design workshop using MineCraft. The workshop brought women, youth, children and the elderly together where they worked together in mixed groups on designing the space. MineCraft played a crucial role as a tool for participatory design. It allowed the community to visualize their needs through designing within the space in 3D, which allows for realistic designs that are later consolidated into a main design that takes into consideration the main common elements of the design between the groups.

**The way forward**

There is much to be done in the Region in planning for public spaces and allocating more land and resources, collecting data on the different interactions within public spaces (e.g.: violence against women and girls, expansion of public spaces and their changes, quality, etc) capacitating local and national authorities on competing with international organizations for funding from donors on issues related to public spaces and on developing participatory project implementation and for strategically developing public space networks, in developing maintenance strategies and on other city management related matters. Moreover, governance structures can still be further adopted to include stronger representation from the civil community and stronger ownership from the community. Needless to say, those rural areas are still understudied and still under-represented.

Currently, UN-Habitat is building on its past vast and diverse experiences to tackle the issues surrounding public spaces in the Region. It is currently focusing on three vulnerable groups; women, girls and children through developing sub-programmes that concentrate on creating safe public spaces for these groups. These sub-programmes would address the challenges that are facing the region in terms of design, capacity development and knowledge sharing with focus on the women, girls and children safety. Using UN-Habitat’s experience and the lesson learnt from the projects, the sub-programmes would fill in the regional gaps and to implement more strategic projects that can influence the national policies and that can guide local and national authorities in developing city-wide development plans for public spaces and guidelines for city-wide assessments.

For child friendly public spaces, UN-Habitat, UNICEF and WHO are jointly supporting the development of Global Principles and Guidance for “Public Spaces for Children” to support national and subnational authorities and stakeholders to accelerate achievement of target 11.7 of the 2030 Agenda. For women and girls, the programme will look into the public spaces designs and policies that govern them with a focus on how to support women through designing public spaces that empower women and allow them to enjoy the public life without fear. These sub-programmes will utilise participatory tools to ensure ownership from the stakeholders.
VIEWPOINT

Heritage in the Street: Megawra | BEC’s Athar Lina Initiative in Historic Cairo

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Abstract
Based in al-Khalifa in Historic Cairo and run by the Megawra-Built Environment Collective, Athar Lina is a participatory initiative to establish modalities of citizen participation in heritage conservation based on a vision of heritage as a resource not a burden. Since its inception in 2012, Athar Lina has worked on conservation, heritage education, urban revitalization and heritage industries. It has conserved four domes from the 12th and 14th century and is currently working on the conservation of two other monuments including al-Imam al-Shafi’i shrine. It runs an Open-Spaces Program focusing on improving infrastructure and services to upgrade quality of open spaces. This is directly linked to Athar Lina’s Ground Water Research Project which seeks to resolve problems of groundwater-rise in heritage sites by extracting water and reusing it for the benefit of the community for purposes such as irrigation and cleaning. In addition to its Heritage Education Program and the Heritage Summer School it runs for al-Khalifa’s children, it runs the Athar Lina Heritage Design Thinking School which explores the potential of heritage for income-generation. Finally, through its research and advocacy project, Citizen Participation in Historic Cairo, Athar Lina is working on conservation, revitalization and management plans for al-Khalifa.

Keywords: heritage management, community development, conservation, participation, historic Cairo

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A mural of women in a men-only coffeeshop in Historic Cairo

In 2013, Agnes Michalczyk, a Polish-Egyptian Artist proposed a mural to be painted on the wall of a coffeeshop in al-Khalifa Street in Historic Cairo. The mural was of a group of Rubenesque middle-aged women dressed in traditional Egyptian *galabiyyas* (loose floor length tunics) and smoking *shisha* (waterpipes). In the background of the mural, another group of even more extraordinary women are represented through the domes built in their honour; Shajar al-Durr Dome, built in 1250 to commemorate Islamic Egypt’s only female ruler and al-Sayyida Ruqayya Dome, built in 1144 by another woman in honour of a pious woman and descendant of the Prophet Muhammad. The actual domes are only a stone’s throw away and they are as familiar as old friends to the bunch of old men who meet daily in the coffeeshop. Not as familiar though, is the sight of women smoking *shisha* in traditionally male street-side coffeeshops in Cairo.

The proposed mural was part of a set of activities to celebrate the heritage of al-Khalifa Street, a street known for its wealth of heritage sites. The street is most famous for the 9th century Ahmad Ibn Tulun Mosque, one of Egypt’s oldest and most iconic mosques, and for its religious sites of visitation, the most famous of which is al-Sayyida Nafisa Mosque and Shrine. The event was to be called (Spend Your Day in Khalifa) and it marked the launch of several projects to be implemented by Athar Lina Initiative. Activities focusing on heritage conservation, heritage education, heritage industries and urban development were carried out under the umbrella of Megawra-Built Environment Collective and in partnership with the Egyptian Ministry of Antiquities.\(^1\)

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\(^1\) Now part of the Ministry of Tourism and Antiquities.
One year prior, in 2012, the team of Athar Lina had organised a series of participatory research and design meetings to study the relationship between the heritage of the street and the community. The question was concerning the lack of participation of the community in conserving their neighbourhood’s heritage. The premise was that they felt alienated from it and that their sense of ownership of heritage had been severed through a chain of misconceived heritage policy decisions by a State that treated them as adversaries rather than custodians of their own heritage. The assumption was that people would regain their sense of ownership if they felt they benefitted from their heritage. Benefit could be economic, social, cultural, or spiritual. The question was how to go about rebuilding that proprietary relationship.

By the end of 2012 - and after 6 months of discussion between residents, government officials, academics, professionals and heritage advocates – we concluded that action could be taken to reconnect heritage to the community by conceiving of it as a driver for development. This action should take the form of heritage education, conservation and rehabilitation of historic buildings for the benefit of the neighbourhood and that these actions should be grounded in socio-economic and urban development that manages and utilises heritage in a manner that improves quality of life in the city.

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2 Implemented in 2012 with a personal grant from the Danish Egyptian Dialogue Institute.
Figure 3. Stakeholder meeting in Ibn Tulun Mosque © Athar Lina
By the time the mural of the shisha-smoking women was being considered, Athar Lina Initiative had conducted a heritage education program in one of the local primary schools, and started preparing for its own heritage summer camp for local children in an early 20th century building it was rehabilitating for that purpose. It had also obtained funding for the first in the line of a series conservation efforts, Shajar al-Durr Dome Conservation Project3. The team had already understood that one of the hazards of development work was the failure to understand the dynamics of the neighbourhood of intervention. Socio-economic patterns needed to be studied, tapped into, and built on. Insensitive actions, however small, could cause a ripple effect that could undermine the work in its entirety. This is why we were apprehensive of the radical choice of artist, however well-justified, to push a feminist agenda and impose women onto the sphere of public space if only through visual representation. The coffee-owner, however, was delighted. ‘Amm Mustafa, a 60-something gruff man loved the drawing and his judgment proved to be sounder than ours. The women were not just accepted; they were appreciated and soon became a landmark that brought the coffee shop more business. It became common for strangers visiting the neighbourhood, for its many mawlids (saint day celebrations) for example, to meet at “the coffeeshop with the women”.

3 Implemented between 2013 and 2015 in partnership with the Egyptian Ministry of Antiquities and with funding from the American Research Centre in Egypt with additional funding from the Barakat Trust.
Urban issues in al-Khalifa
This was one of the first lessons we learned on the importance of art interventions in public space and their value as a tool for experimentation and trust-building. When we started working in al-Khalifa, we did so primarily out of appreciation for its heritage as one of the most significant neighbourhoods within the World Heritage Site of Historic Cairo. We understood – and advocated for – the importance of bringing communities to the forefront of the struggle to preserve and manage heritage but we were also daunted by the complexities of its urban setting. In addition to struggling to understand socio-economic dynamics, any attempt at renovating residential buildings or improving public space was thwarted by infrastructure issues, most notably rising groundwater, and service problems such as waste management. This was in addition to the fact that right to public space was arbitrary, given and taken at the caprice of the State, and that certain members of the community, women and children in particular, were less entitled to it than others. With street art, whether performative or visual, we were able to circumvent endemic issues and add beauty and joy to public space. We could try out new ideas and learn from them through temporary installations. We could deliberately target the marginalised and under-represented. And we could connect with the community over human values of art and play.
Spend Your Day in Khalifa
Since 2013, we have organized seven Spend Your Day in Khalifa (SDYK) festivals. Their geographical reach has extended beyond al-Khalifa Street to include other neighbourhoods in the wider al-Khalifa District, namely al-Hattaba, a historic residential neighbourhood north of the Citadel wrongly categorised as an informal settlement and threatened with evacuation and demolition, and the historic cemetery of al-Imam al-Shafi’i, part of Cairo’s so-called City of the Dead. We have organised music, storytelling, dance and circus acts in the street, curated heritage inspired murals and signage, exhibited arts and crafts, run guided tours and interactive heritage education activities, brought children and youth together through sports, inaugurated our conservation and urban upgrade projects and promoted causes such as the rights of Syrian immigrants to culture and heritage. Close to 200 Syrian and Egyptian children participated in interactive visits to historical sites in the neighbourhood of al-Khalifa in Historic Cairo, discussed history within themes that centred on the meaning of family, the family home, the value of play and the benefits of travel, and expressed their understanding of these issues through storytelling and visual art.
We have also used the opportunity to promote our own work and fundraise for our Khalifa Heritage Summer Camp for Kids which until 2018 was mostly funded from the revenue of this festival. SDYK has always been a collaborative effort. The women of al-Khalifa have cooked for us, its men and youth have helped ensure that the day runs smoothly, and its artisans and shopkeepers have exhibited their products and opened their shops and workshops to visitors. Al-Khalifa’s children join our events in throngs and our Summer Camp students play host to the visitors and help run our tours. Organisations such as Drosos Foundation, DEDI, UNHCR, and the British Council and private entities such as AIC Finance have funded it. We have partnered with charities such as Mashrou3 Kheir, local neighbourhood schools, universities such as Ain Shams University, and initiatives such as Nafas and Cairo Sketchers. For two years, we organised the event within a larger celebration featuring close to ten other heritage initiatives – as partners in the Egypt Heritage Network. We have relied on the generosity and enthusiasm of tour guides, artists, performers, artisans, designers and media professionals. And most importantly, we have continued to depend on the support and partnership of the Ministry of Antiquities and Tourism. As our main governmental partner, it has liaised on our behalf with all relevant governmental entities, opened the doors of all its monuments for us, sent its antiquities inspectors down to help us and played an pivotal role in promoting the event. Cairo Governorate’s support has also been invaluable, and it would not have been possible to occupy the street the way we do without their cooperation.
Athar Lina’s Urban Regeneration Program
While SDYK is our longest running public space program, it is not the only one. Since 2016, we have focused on issues of groundwater and waste management in a two-pronged approach. We work on the wider issue with the representative governmental authority, doing the required research to propose meaningful fundamental solutions that could inform decision makers. We also try to identify areas that we can intervene in. These tend to be local interventions in disused open spaces.

For example, high groundwater causes rising salt damp that damages buildings and affects health. We soon ascertained that this water, which is so high it inundates basements and heritage sites, is mostly the result of seepage from supply and sewage networks and that it is vital that they are repaired, not just in al-Khalifa but also in adjacent neighbourhoods. Our advocacy efforts with the government have resulted in the Ministry of Housing commissioning a study and leading the current governmental efforts to lower the groundwater level.

We ourselves worked on techniques to extract this water and reuse it. We installed two systems for the reuse of groundwater for cleaning and irrigation; in a private building that we currently use as our headquarters and in a local mosque yard. We also designed a 3000 sqm park to be watered and cleaned using groundwater and are currently collaborating with Cairo Governorate on its construction. In order to

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4 Khalifa Heritage and Environment Park design is in collaboration with the Egyptian firm, A for Architecture and was made possible through funding from the American Research Centre in Egypt and the US Embassy in Cairo and with additional technical support from the US Forest Service.
design the park, Athar Lina conducted a needs assessment and accessibility studies through field surveys and participatory workshops with youth, women, and children.

Figure 10. Proposed design for al-Khalifa Heritage and Environment Park © Athar Lina

Implementation of Phase 1 is funded by Cairo Governorate and of Phase 2 by the Netherlands Embassy in Cairo.
Al-Hattaba – a historic neighbourhood threatened with demolition
We have also worked with Cairo Governorate to clean and rehabilitate other abandoned sites for recreational purposes. So far, two sites have been converted into football pitches and a third into a community garden. The community garden is in the neighbourhood of al-Hattaba which, as mentioned above, is currently threatened with demolition. This historic neighbourhood is the victim of the inability of the current
strategy for informal settlements to differentiate between dilapidated historic sites and unsafe informal settlements. What adds insult to injury is the fact that the historic homes of al-Hattaba are in such a poor state because for almost 50 years, their owners have been prevented from renovating them by the State. In a misguided attempt of the State to free the historic Cairo Citadel from what it deemed as encroachments, the Egyptian Government declared this neighbourhood an evacuation zone as early as the 1970s, banned construction and renovation and left the area to fall apart. In identifying neighbourhoods such as al-Hattaba (north of the Citadel) and ‘Arab al-Yasar (south of the Citadel) as encroachments, the State ignores historical evidence that dates the urban fabric of these areas at latest to the 19th century and their inception at latest to the 15th century.

Since 2018, we have advocated for the preservation of al-Hattaba. We prepared an alternative development plan for its preservation and regeneration as a historic residential craft neighbourhood that lies on the tourist path from Cairo Citadel to the iconic mosques of Sultan Hasan and al-Rifa’i. We worked on interventions such as constructing a community garden, and the conservation of a 15th century listed building. We have also studied the economic potential of the neighbourhood, focusing on heritage industries as a means for income generation. Through our heritage industries program, the Athar Lina Heritage Design Thinking School, we have designed and executed craft products, heritage tours and interactive family events inspired by al-Hattaba and in collaboration with its residents and artisans.

5 The community garden was funded by PepsiCo Egypt. Al-Shurafa Shrine Conservation Project started in 2020 and is implemented in partnership with the Ministry of Tourism and Antiquities with funding from the American Research Centre in Cairo.

6 Started in 2018 with funding from Drosos Foundation and implemented in partnership with the Ministry of Tourism and Antiquities.
Al-Imam al-Shafi’i Cemetery: Athar Lina’s third focus area
Finally, at the core of our work in our third focus area, al-Imam al-Shafi’i neighbourhood, is the conservation of the 13th century al-Imam al-Shafi’i Dome. Our challenge here is to promote cultural appreciation of al-Shafi’i Dome that enriches its standing as a destination for religious tourism. It is also to raise awareness of the historic nature of these cemeteries as a mix of life and death. Art is used here to convey the complexity of this unconventional cemetery that has been the home of many since the 9th century. We have partnered with storyteller Chirine el-Ansary to share this nuanced narrative through storytelling walks. We also worked with designer and street artist Adham Bakry to design and implement a series of murals that constitute stops in a tour for independent travellers. The murals are linked to QR codes with information on the history of the cemetery.

Policy-related issues
Of course, not everything has been clear sailing. Generally speaking, civil society’s access to public space has fluctuated drastically in the last decade. In terms of governance and advocacy, we went from the no-holds-barred years of 2011 and 2012 when anything was possible, but nothing got done from the Government’s side, to a gradual increase in regulation and State control.

7 Implemented between 2016 and 2021 in partnership with the Ministry of Antiquities and Tourism and with funding from the Ambassadors’ Fund for Cultural Preservation and additional funding from the Barakat Trust and the Prince Claus Fund.
Another issue facing us today is the need to reconcile our work with the current State preference for ambitious top-down interventions in which there is little to no consultation with civil society. This is reflected in the ability to organise, mobilise and shape public space. On the bright side, Athar Lina is fortunate because its work comes under a mandate of heritage and conservation and as such, is seen as a benign activity that the State encourages civil society to participate in. The antiquities authorities’ support is invaluable in this regard and it is the result of an incremental process of trust-building that started in 2012.

2011 brought with it the establishment of an independent ministry, the Ministry of Antiquities, responsible for heritage. Ironically, due to budget cuts in response to waning tourism, it had almost no budget for the large conservation projects it considered its main responsibility. Furthermore, with the fluidity and openness of 2011, came an interest in participation and a realisation of the role people could – and should – play in benefiting and caring for their heritage. This meant that when we approached the antiquities authorities in 2012 to partner on softer approaches to heritage management that include participation and education, their response was positive, if not enthusiastic. Our work also coincided with UNESCO’s Urban Regeneration of Historic Cairo (URHC) research project that aimed to orient the Egyptian State towards a more integrated approach to heritage that dealt with historic urban fabric rather than individual monuments and promoted citizen participation and right to heritage. URHC’s activities also brought together a wider range of heritage stakeholders and promoted a participatory, integrated, inter-sectorial and sustainable heritage approach. Finally, the surge of initiatives, practices and advocacy groups concerned with heritage signalled the birth of a “Brave New World” for Egyptian heritage.
Figure 17. Collaborative mapping exercise in 2012 including a government official, academic and urban development expert © Athar Lina

Figure 18. Demolition of sections of Cairo’s historic cemetery to make room for bridges and widen roads
By 2019, the map of heritage management had changed quite drastically. While many professional practices and non-governmental actors continue to function and adopt an integrated participatory approach, new State policies tend to gravitate towards ambitious projects that are fast, large and top down. The current work on widening streets and building bridges, many of which cut through historic neighbourhoods, is a case in point. The State has also tightened its control over civil society. Access to public space, and funding and the ability to work directly with communities is monitored and controlled. On a positive note, this means that the State has assumed more responsibility for the city. For example, in al-Khalifa Street, the government is currently implementing a massive project to resolve the issue of groundwater, develop and promote a tourist itinerary and upgrade streets and buildings along that path.

Now what?
The paint on ‘Am Mustafa’s shisha-smoking women is now peeling and Agnes has come back to redo it, but with a twist. She now proposes to link it to an augmented reality animation. This is not a one-off attempt to link al-Khalifa to the virtual world. The QR codes of the self-guided tours of al-Shafi’i Cemetery are part of an integrated website promoting al-Khalifa launched at the end of 2020. Al-Khalifa, along with the rest of the world, seems to be going online. But no virtual reality, however sophisticated, is a substitute for the smells, sounds, tastes and sights of the tour de force that is Historic Cairo.

8 Al-Khalifa’s website (https://khalifa.atharlina.com/) includes information on its heritage sites, history, oral history, people and crafts. It promotes Khalifa inspired products and activities and even includes downloadable heritage activity packs for children. More detailed information of Athar Lina’s work can be found at (https://atharlina.com/).
Thank you for reading!

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