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DESIGN INDICATORS OF CRITERIA OF DIFFERENT ACTIVITIES IN PUBLIC PLACES DURING COVID-19 PANDEMIC

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ABSTRACT

Health pandemics are one of the greatest threats to human life. The more spacious and interdependent the city becomes, the faster the spread of epidemics is unless the State takes public health measures. Green places and public places contribute to improving the health of the population during the pandemics. Therefore, Poland has banned cars in parks to help people to get out and walk of their homes during the quarantine. However, as spatial spacing measures continue, cities may allocate more public places to, people only to practice their various activities.

This paper aims to observe ideas introduced about how to change our relationship with public places, through a review some proposals by multiple parties concerned with the issue of urbanization under the Corona pandemic. Such proposals focus on identifying design guides for activities in public places within; the city, Such as providing the places with sanitary facilities that help with the ongoing sterilization process, as well as technical facilities that help monitor the status quo to alert and act accordingly. In addition to the various urban solutions that we will review in the context of the study in terms of achieving the principle of social convergence and spatial divergence.

The study follows the theoretical and analytical approach in monitoring the changes that occurred on urban places as a result of Corona virus, analyzing models for the study that clarified the changes of activities in urban places, and reaching a set of indicators for designing urban places during the pandemic.

KEYWORDS

Design activities, Covid19, Design guideline, Physical distances, Public place

المؤشرات التصميمية للأنشطة المتنوعة بالأماكن العامة أثناء جائحة كورونا

الملخص

تعد الجوائح الصحية من أكبر المخاطر التي تهدد حياة البشرية، وقد تلعب المدن المزدحمة دورا كبيرا في انتشار الأمراض المعدية، وكلما أصبحت المدينة أكثر اتساعا وترابطا، زادت سرعة انتشار الأوبئة فيها، ما لم تتخذ الدولة تدابير صحية عامة. تساهم المساحات الخضراء والأماكن العامة في تحسين صحة السكان أثناء الجوائح، ولهذا أغلقت بولندا متنزهاتها أمام السيارات لمساعدة الناس على الخروج والمشى من منازلهم أثناء الحجر الصحي. لكن في ظل استمرار تدابير التباعد المكاني، قد تخصص المدن مساحات أكبر من أماكنها العامة للناس فقط لممارسة انشتطهم المختلفة.

تهدف هذه الورقة إلى ملاحظة الأفكار المقدمة حول كيفية تغيير علاقتنا بالأماكن العامة من خلال استعراض لبعض المقترحات من قبل جهات متعددة تهتم بمسألة العمران فى ظل جائحة كورونا والتى تركز علي تحديد موجهات تصميمية للأنشطة بالأماكن العامة داخل المدينة، كتزويد الاماكن بمرافق صحية تساعد علي عملية التعقيم المستمرة وايضا مرافق تكنولوجية تساعد علي رصد الوضع القائم للتنبيه واتخاذ اللازم. بالإضافة الي العديد من الحلول العمرانية التي سنستعرضها فى سياق الدراسة من حيث تحقيق مبدأ التقارب الاجتماعي والتباعد المكاني .

تتبع الدراسة المنهج النظري والتحليلي في رصد التغيرات التي حدثت على الأماكن الحضرية نتيجة فيروس كورونا، وتحليل نماذج الدراسة التي أوضحت تغير الأنشطة في الأماكن الحضرية، وتم استنتاج مجموعة من المؤشرات لتصميم الأماكن الحضرية خلال فترة الجائحة.

الكلمات المفتاحية
تصميم الانشطة، فيروس كورونا، تصميم الموجهات، المسافات المادية، المكان العام

INTRODUCTION

Ibn Khaldoun stated: " A large number of pestilences has its reason in the large number of famines just mentioned. Or, it has its reason in the many disturbances that result from the disintegration of the dynasty. There are much unrest and bloodshed, and plagues occur. The principal reason for the latter is the corruption of the air (climate) through(too) large a civilization (population).
It results from the putrefaction and the many evil moistures with which (the air) have contact (in a dense civilization). Now, air nourishes the animal spirit and is constantly with it. When it is corrupted, corruption affects the temper of (the spirit). If corruption is strong, the lung is afflicted with the disease. This results in epidemics, which affect the lung in particular. (Even) if the corruption is not strong or great, - putrefaction grows and multiplies under (its influence), resulting in many fevers that affect the tempers, and the bodies become sick and perish."(Bin Khalidoun, M.A. 1992).

Here, Bin Khalidoun highlight the most important urban component, environmental place, which maintains sufficient oxygen supply to the city while leaving paths for air and solar radiation to refresh the city and its occupants. This factor comes before building shapes, planning for employment, refreshing the tourism industry, and establishing public and governmental entities. Also, this signifies lung diseases that strike various non-environmentally-prepared cities. Lack of sound breathing will inevitably impact citizens' psychological and physical health; because the tighter breathing is, the tighter becomes the soul and the thoughts, the worse morals turn, as well as the appearance of irritation and raving, etc. The medical rule is: "Fresh air refreshes and renews the mind."

This is the paper aim, particularly after the emergence of COVID-19, which is classified by the World Health Organization as a respiratory virus, directly related to the lung. As people abided by the WHO recommendations of clearing streets, parks, beaches, and public plazas all over the world; particularly in vivid cities such as New York, Rome, and Barcelona; major metropolitan areas now appear like ghost cities because residents stay at home for the public interest.

In the middle of this crisis, residents felt losing vivid socialization due to the complete/partial shutdown of cities. Many researchers and research centers measured changes to public places due to WHO recommendations of social distancing. Such changes during-COVID-19 world were informed to urban planners and designers. Such entities include the Simcoe Muskoka District Health Unit. This unit provides recommendations and guidance concerning acting in open public places, for leaving closed places to conduct activities in open places for achieving entertainment desires such as walking, running, and cycling (Simcoe Muskoka District Health Unit, 2020).

Also, the British government issued a guide for acting in open, public places. The guide states that government guidelines for reducing the transfer of Corona Virus to others are to go in fresh air while maintaining social distancing (london.gov., 2020).

Where We Stand organization provided 15 designs of urban places prepared by leading global designers and firms, in response to the new reality of cities during the COVID-19 pandemic while maintaining social distances. Projects were introduced through new visual systems that create safe, welcoming environments (Michon, 2020).

Another organization, Project for Public Spaces, sought the same goal through symposiums, and expert articles on this topic (Bobby B., Madison M., Maggie P., Nidhi G.,2020).

Suggestions for overcoming the crisis were the result of various inquiries:

- Will our feeling of public places and places change forever?
- When do take the adventure of going out?
- What are the types of unfamiliar social interactions that have emerged lately?
- How can social relationships be changed in public places?
- What is the link between public places design and disease spread?

Various urban researchers posed many questions about the long-term effects of COVID-19 on public places upon removing such distancing restrictions on citizens? The relationship of the same to design, future use, and public place visualizations? Would the effect on public places a shifting one or it would require designing new places to meet emerging needs?

Restrictions were imposed on using public places, as well as social distancing resulting from political decisions adopted for public health protection, as world populations were asked to stay at home and avoid gatherings and public places.

This paper aims to observe ideas introduced about how to change our relationship with public places, in terms of different activities carried out in such places. also Leeds to proposed ideas of change or reuse in a manner that grants the health safety of users.

The study follows the theoretical and analytical approach in monitoring the changes that occurred on urban places as a result Corona virus, analyzing models for the study that clarified the change of activities in urban places, and reaching a set of indicators for designing urban places during the pandemic.

1. THE IMPORTANCE OF PUBLIC PLACES BEFORE COVID-19 PANDEMIC

Public places play a crucial role in our life; most likely shaping the startup of communities. We meet our neighbors in the street and have a quick chat, meet our friend downtown for lunch, or go for a short picnic with family in the park. Streets, city centers, and parks are some of those places which we need every day. Such places provide an area for those with common interests and values to connect, interact, establish mutual relations, and feel belonging to the place. (Carr, S., Stephen, C., Francis, M., Rivlin, L. G., & Stone, A. M..,1992).
Such activities shape the special features of public place to become "a public place" for a group of users who desire to maintain connections with the rest of the surrounding world. Public places are important for meeting such needs. (Carr, S., et.Al.,1992).
Madanipour presents the importance of public places in a city. They provide ways of movement, communication, a common ground for enjoyment and relaxation, with the

ability of education and knowledge dissemination. Public places play a crucial role in the history of a city and the social life of its citizens. (Madanipour,2003).
Engwicht mentioned the term "Adults play" to express the types of social activities, practiced in public places, in which various adult indulge. (Engwicht,1999).
To identify the importance of public places, they will be addressed in terms of activities and social aspects in accordance with the study context (Sablet, M. D.,1988). as seen in fig.1.

Figure (1): People go out to public parks to celebrate their cultural and religious holidays (manifestations of celebrating the blessed Eid Al-Fitr and Eid Sham El-Nessim in Egypt, 2009)

1.1 Importance in Terms of Activities

Public places are important for practicing the necessary human activities. They can be split into places of kinetic activities and places of static ones. Kinetic activities are (wandering and picnicking, practicing sports, walking, celebrations, etc.). Static activities are (relaxation, discussions, talking, waiting, reading, contemplation, watching, eating and drinking, etc.). as seen in fig.2.

Fig (2): Practicing different activities in public places
Source: Shopping in Los Angeles, 2010 & Transforming cities and places . Pitt Street Mall, 2010

1.2 Importance in Terms of Social Life

Sablet stresses the role of public places in strengthening relationships; as they reduce controlled, classified relationships and enhance social communication more than closed places (Sablet,1988). Such urban places help the city by providing places for social interaction of large numbers of people of different ages and races. as seen in fig.3

Fig (3): Citizens' participation in public events of a city
Source: (Boulder, 2010)

2. PANDEMIC IMPACT ON PUBLIC PLACES

The COVID-19 pandemic impacted crowded streets in major cities all over the world. Now, they appear empty due to strict shutdowns (O'Reilly.L., 2020).
A series of photos taken show how highways, touristic places, and worship places were cleared in response to attempts to combat the new COVID-19 pandemic (Fahey.R,2020). As we have seen in fig.4.

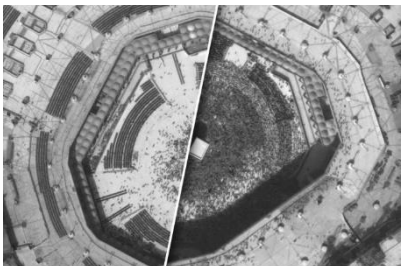


Fig (4): Photo of the area around the Holy Kaaba, in Holy Mecca
Source: (Fahey.R, 2020)

Prominent sights in Europe witnessed decreased visitor numbers, even after reopening, or were completely shut down for fear of increased spread. The following photo shows the number of visitors before and during COVID-19 (Ankel S., 2020). As seen in fig.5.

Fig (5): Photo of people outside Buckingham Palace, London, on March 13, 2020, and another on March 18, 2020
Source: (Fahey.R, 2020)

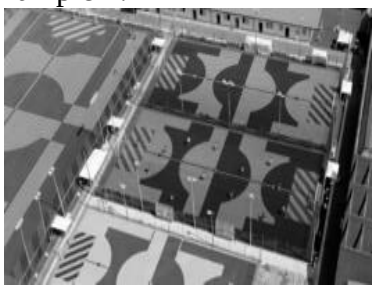
3. PROPOSALS FOR ADDRESSING THE CRISIS

The following is an analysis of some global projects of public place design for activities during the COVID-19 crisis. The design principles of such places will be introduced. As we have seen in table1.

3.1 First: Analysis of Some Projects of Sports Activities in Public Places

Sports stadiums have been closed in many cities, but there are some initiatives to deal with the crisis, as in table (1):

Table (1): Analysis of some projects of sports activities in public places

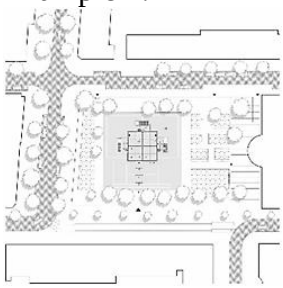
Activity	Design principles	Model analysis
Playgrounds Example 1:  Source: (Ravenscroft, T., 2020) Example 2: an urban place of sports halls activities Source: (Harrouk, CH, 2020)	Example1: Integrating social distancing rules while maintaining standard game components. Example 2: Design of individual creative units that take into account the spatial distance of safe contact for enhancing physical health. Source: (Harrouk, CH, 2020)	✓ Reactivating open areas. ✓ Dividing the field into individual players' areas based on known forms. Players must not leave their designated areas. ✓ Distinguishing areas with high contrast colors (vivid fluorescent colors) historically used in a warning. ✓ Yoga domes in Toronto: 50 Geodesic domes were fixed for performing fitness exercises safely. 7 feet high, 12 feet wide, or more than 2 meters high and 3 meters wide. Each dome provides participants with an area of more than 110 square feet of private area. Domes contain heaters and fans.

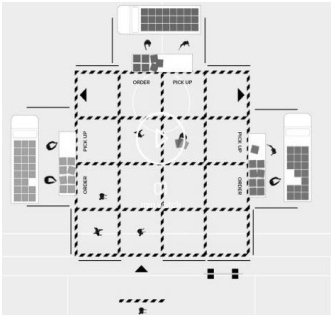
Source: by authors Based on (Johnston,2020) & (Harrouk,2020)

3.2 Second: Analysis of Some Models for Commercial Activities and Their Solutions During the Corona Crisis

Although many markets had closed - most of them on instructions from councils, landowners, or market authorities - many food companies had to close stores which have led to a new pattern of open markets for all outdoor stalls, table (2):

Table (2): Analysis of some models for commercial activities and their solutions during the Corona crisis

Activity	Design principles	Model analysis
Open markets Example 1:  Source: (Frearson.A, 2020)	Example 1: Decentralization of markets, and creation of a shopping environment which not only free from hazards, but also comfortable.	Example 1 ✓ The idea maintains continuity of big markets while changing shape, time, and place. ✓ Deconstructing big markets by distributing the same around the city and opening for longer durations to avoid crowdedness. ✓ People wait in queues away from the net in the figure.

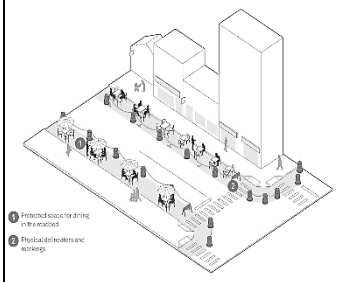
 Source: (Frearson.A, 2020)	Example 2: Source: (Varma.A,No, 2020)	Only 6 people can enter at a time. The net specified by squares has marks on the ground to imply no more than one person inside a square. ✓ This unit is easily transported and executed in various places. Example 2: A street food market model was developed. People can buy fresh products without contact. The idea depends on setting a square net – which can be easily made in public plazas of any city while following distancing instructions.

Source: by authors Based on (Frearson,2020)

3.3 Third: Analysis of Some Feeding Activities in Some Cities:

COVID-19 and social-distancing measures have left several consumers' favorite activities are hard to get such as the disappearance of indoor dining in many cities, so the restaurants have adapted, ramping up outdoor dining as in table (3), curbside pickup, and greater adoption of food delivery apps:

Table (3): Analysis of some feeding activities in some cities

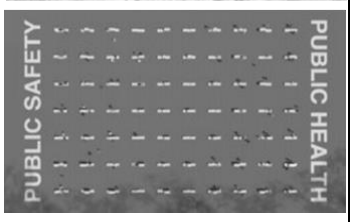
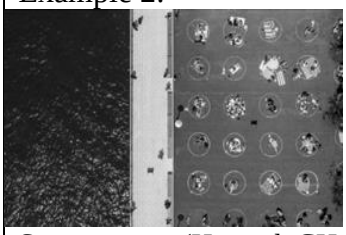
Activity	Design principles	Model analysis
Restaurants and cafés Example 1:  Source: National association of city transportation officials (NACTO, 2020).	Taped paths over circulation paths or pavements near or in front of restaurants. Example 2: 18 public places were opened in Philinius, Lithuania – including the central cathedral plaza – for open-air restaurants and cafés to allow companies to work safely. source: (Euronews, 2020)	✓ Establishing food areas in open places to provide safety and spatial distancing. ✓ Will have visual importance in attracting the audience to such places. ✓ Increasing simple, low-cost meals. ✓ Providing green components in the layout to ensure parks improve public place function during the pandemic. Restaurant/cafés owners must coordinate with permit officials to use part of the street or pavement before the restaurant. Such parts shall be previously specified by the competent authority. Clear occupancy criteria must be set to be abided by.

Source: by authors Based on (Khan,2020) & (Levy,2020)

3.4 Fourth: Analysis of Some Projects of Public Parks and Promenades

Some cities have enabled people to visit parks, walkways, and open places as a way to relieve stress, get some fresh air, and stay active. While these facilities and areas can offer health benefits, it is important to follow some procedures for physical spacing as in table (4):

Tabe(4): Analysis of some projects of Public Parks and Promenades

Activity	Design principles	Model analysis
Public Parks and Promenades Example 1: High-density urban places  Source: (Ravenscroft,T. 2020) Example 2:  Source: (Harrouk.CH, 2020)	Example 1: Social organization (Center of gravity points of spatial distances) Source: (Ravenscroft,T. 2020) Example 2: Specifying drawn circles for social differentiation Source: (Cogley,B.2020)	✓ This place contains various entertainment, eating, and drinking activities. ✓ Making public places maps introducing activities of visitors. ✓ Design of smart art pieces with functional and aesthetic value. ✓ Such collections are nine different shapes that look like seats. There are platforms to guide individuals about how to sit down or stand while maintaining social distances. ✓ Art pieces record people's interactions by recording data about individuals' feeling of the public place. Then, the area is activated based on programming such ideas. Example2: Domino Park, for ensuring social distancing measures recommended by health authorities. ✓ 30 circles: each circle is 8 feet in diameter, and 6 feet apart from each other. Displaying various types of signs about social distancing and following safety rules.

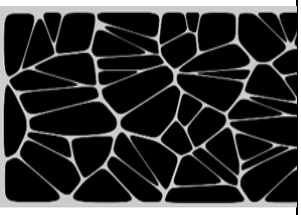
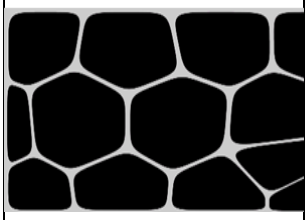
Source: by authors Based on (Schwarz,2020) & (Cogley,2020)

3.5 Fifth: Analysis of Some Models of Public Places of Mixed Activities

The ongoing COVID-19 crisis has led to large-scale anxieties about the future of the arts, Many believe this pandemic will impact our celebrations viewing behaviors, we might stay away from theatres to avoid large gatherings. This could also indicate a shift towards viewing celebrations on online platforms which have already made a dent

during the lockdown. However, some global models show physical distance in the public places of large gatherings, as in table (5):

Table (5): Analysis of some models of Public places of mixed activities

Activity	Design principles	Model analysis
Mixed activities (parties, theatre or cinema shows) and protestations Example 1: Source: (dn&co, 2020) Example 2: New York City, USA, Open-air wedding party. Source: National association of city transportation officials (NACTO), (2020)	Spatial dispersion with continuous production of flexible organic interventions.   Source: dn&co, (2020)	✓ The idea adopts integrating design and technology). ✓ Using the VORONOI planning system which continuously changing patterns. ✓ The design represents the organic pattern characterized by beauty and naturalness. ✓ The system divides any level into nods and dots separated according to spatial distances. ✓ Even organizers use a software application to construct the VORONOI plan on the urban place layout and share the same with attendants to facilitate finding their places within the place. Such activities can take place in commercial streets, parking places, or pedestrian-only paths such as residential streets or public parks.

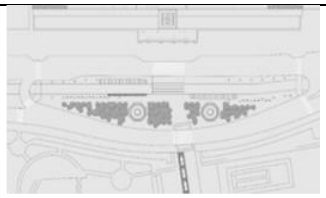
Source: by authors Based on (dn&co.,2020)

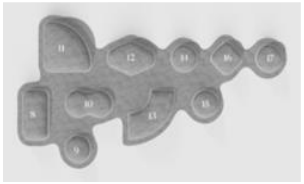
3.6 Sixth: Analysis of Some Models of Public Places of Mixed Activities Attached to Public Buildings

Restrictions on using public places and physical distancing have been key policy measures to reduce the pandemic's spread and protect public health, and now we see social interactions in open places table (6), which asks about how our social use of public places may need to change.

Table (6): Analysis of some models of Public places of mixed activities attached to public buildings

Activity	Design principles	Model analysis
Mixed activities (plazas attached to public buildings) Example 1:	Depending on landscape topology	✓ Providing an outdoor area for dining and walking. ✓ Places for food trucks inside the building transferred to outer areas.





Multi-function place
Source: (Manual, 2020)

Example 2:
Museums

Source: (Lampe.w,2020)

Example 3: Classrooms and health checks

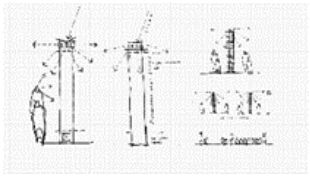
In Wuhan, China, students line up in high schools to enter their schools by following ground marks and checking temperature upon entering.
Source: National association of city transportation officials (NACTO, 2020)

Example 4: Multi-use public places.

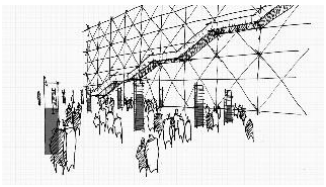
Curved landscape units

Source: (Manual, 2020)

Example 2: Control of flow across the urban place and, thus, controlling gathering density at certain points.



Source: (Lampe.w, 2020)



Example 4:
Turin, Italy, public areas transformed into learning places at a school garden.
Adding simple elements and interventions to place results in significant changes to existing activities.

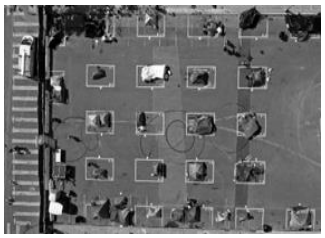
Source: (Character, 2020)

- ✓ Reserving areas in the urban place via an application or a ticket.
- ✓ Providing food truck services in public places.
- ✓ Having a truck service model that limits food waiting queues.

Continuous awareness in urban places through ads and posters.

- ✓ Control of flow across place by audio/visually attracting attention via units with sensors for alerting surroundings either by making a voice or a colored flash to alert people to move away from the crowded perimeter.
- ✓ Adding mobile elements such as seats, etc.
- ✓ Fixtures for connecting place to the Internet and electric grid.
- ✓ Increasing pavement widths and using the same for various purposes.
- ✓ Turning street place for practicing sport during shutdown times.
- ✓ A complete or partial shutdown of streets or car parking paths to identify service location.
- ✓ Providing appropriate areas and marks for service receivers, and using temporary signs to show the place of services.

Using place as a meeting place, which can be previously

 Source: (Character, 2020) Example 5:  Source: (Canales. K, 2020)	Example 5: social services distribution centers project (public buildings) A camp run by the disabled, San Francisco, USA. Example 6: Adopting microphones or audio seats with microphones for whispering between users; providing a new conversation method. Example 7: Closed meeting activities Source: (World's Greatest Internship, 2020)	reserved via an application. It can be spontaneously used by starting a chat with another through messenger applications.

Source: by authors Based on data from **(**Carr, S., Stephen& others, 1992) & (Jacobs & others,1987) & (Mossop& others 2001) & (Chen, 2020)

4. THE IMPORTANCE OF PUBLIC PLACES DURING THE COVID-19 PANDEMIC

As budgets shrink and companies struggle, place could be the most precious thing we have. Decision-makers should carefully consider the types of capital already in hand. "What is happening to vacant areas now, and how are they used?" "Can any form of transformation take place there?" This would require working closely with landowners to reuse unused car parks or other private open places.
"In this stage, backyards and pavements are essential real estates". "This is how you can start making extra money, whether a dining area or a place where you can sell your merchandise which is safer to people by allowing more social distancing". "This turns ordinary real estate rules upside down, as most open places are deemed a responsibility because they reduce to impact of leasable area."

5. APROPOSAL OF PUBLIC PLACES DESIGN CRITERIA DURING THE COVID-19 PANDEMIC

Establishing public places can be directly driven by a governmental decision, or indirectly, as a result of private developments such as the need for providing better services or via redeveloping urban areas. Mossop & Walton & Barnes, L., et. Al. , emphasized that direct decisions for establishing public places induce irregular places (Mossop.& Walton,2001)&(Barnes, L., et.Al.,1995).

The process of establishing public places require communication and engagement of all concerned parties; planners, designers, executives, managers, policymakers, and users.
The design follows the major steps of information gathering, assessment, and considering alternatives and, then, setting a plan followed by making a decision. So, there are criteria observed by several sources for making public places according to Matthew Carmona et al, Allan Jacobs & Donald Appleyard, Kevin Lynch, and the PPS agency.
Here, it can be seen that common features of a place to attain high-quality standards are:

- Access and communication: The place must be available and accessible.
- Control over place components and, consequently, appropriateness (environmental criterion).
- Identity and authenticity.
- Privacy.
- Interaction (mutual influence with users).
- Self-dependence, and good use of capabilities in hand (sustainability criterion).
- Standards of public and health safety.

So, the criteria required for public places during the COVID-19 pandemic are not far from the above-mentioned criteria as both aims at reaching spatial and human comfort. This includes:

5.1 Safety and Comfort

A public place can provide various benefits to health and wellbeing. Those benefits cannot be attained without ensuring personal safety and comfort for everyone.
Yet, safety and comfort can mean different things to different people. They are also multi-faceted; requiring coordination among design, administration, policymaking, transport planning, the police, arts, and culture, as well as other factors that impact public places ‘experience. Maggy Parker stated: "The concept of safety is not always based on design". "In many times, it depends on the neighborhood where you live and your background". "Things which make a person/community feel safe, such security officers or the popular urban ideas "Eyes in the street", could make others feel unsafe and unwelcome. So, why do we feel that some public places are established in a better way, or aim to accommodate people better than other public places?"
This challenge is particularly clear through the COVID-19 pandemic. Maggy Parker noticed: "If each person has different thoughts about how bad the pandemic is, or how to get infected/cured, then people abide by different social rules." Without a clear, common understanding and estimation of strategies such as physical distancing and masking, we are not only risking repeating virus emergence but also making our public places less safe and comfortable to many people. In this context, more than any time before, as Madison said, "People must feel you care about them so that they feel they can be comfortable".

5.2 True Societal Participation

"Every day people think about how to feed their children, how to pay rent, don't they? Indeed, there is a park in the street they have no idea how it got there. They might not have time to go to a community meeting to provide inputs about how things look like."

For this reason, the universal participation techniques – such as participant compensation, participation emerging in daily places, building cultural efficiency, and meeting people where they are physically/socially/mentally- are very important.
Practicing authority require true choices. For example, planners/others often come after they have already decided which park or another public place they want to improve. When the community can determine improvement locations, coupled with design and programming, it often leads to more variety in public places. Alleys, car parking transformations, parks, and garden improvements, etc. all have their character and purpose. Business improvement regions and Main Street software usually do this kind of work. Yet, many poor communities do not qualify or have the resources for supporting these types of organizations and, thus, require new models for running places.

5.3 Open Streets Policy

While many cities have executed open street programs since the beginning of the COVID-19 shutdown, these programs are often limited to walking, cycling, and dining in the open. Sometimes they reach city centers and rich districts. Also, rapid building plans were set, usually without direct contribution from communities that were badly harmed by the virus and recession.
Even when such policies are more distributed, Madison argues that one of the main obstacles facing businessmen, to benefit from the same, is the need to go through difficult municipal permits. The process needs to be simplified more, or busy businessmen responsibilities carried, or the need for permits fully eliminated.

6. FINDINGS

Several findings were set concerning how a public place is influenced by design directors of activities inside according to WHO recommendations of spatial, not social, distancing, which require a 2 meters distance between persons.

6.1 Sports Activities Findings

- New designs that achieve more individual practicing of sport; for example, expanding infrastructure to accommodate the flow of people coming for practicing sport (such as expanding running lanes).
- There is a need for widening pavements and redesign pedestrian crosses to meet some social distancing recommendations. For example, Milan was the first city to announce permanent changes regarding widening pavements and providing 35 km of new bicycle lanes in return for eliminating car lanes. It was followed by Boston, London, Portland, and Vancouver in reshaping streets to accommodate bicycling and walking for longer distances.
- Using current electronic reservation systems to support running the effective capacity of public places, such as outdoor playgrounds.
- Relaxation in the open air at parks and paths is allowed, coupled with opening places (such as football playgrounds) for public used, provided spatial distances are abided by.

6.2 Commercial Activities (Markets) Findings

- Adding more areas to accommodate new criteria for gatherings at the entrances of stores, services, and public utilities.
- Streets may need to be redesigned particularly considering launching internet shopping and home delivery of items and services.
- Barriers and marks must be used to draw market borders around the vehicular movement.
- Installing big signs at entrances and setting waiting areas there for use when occupancy is high.
- Using paint and other ground marks to indicate kiosk locations and safe dealing methods. Using barriers to reduce interaction between sellers and clients and maintaining actual distances at points of purchase.
- Changing market layout based on the available area. Examples include successive kiosks and applying the principle of one-way circulation.

6.3 Entertainment Findings (Restaurants and Cafés)

- Establishing "street dining areas" by temporary closure or reuse of streets/paths.
- Setting occupancy rates and amending laws that restrict pedestrian movement or activities in the public right of way.
- This activity is not advised in major crossroads which serve public places/utilities.
- Using tables, chairs, and umbrellas as per need; setting instructions for storage, and equipment dissemination to ensure access of pedestrians, bicycles, and vehicles other than working hours.
- Keeping pedestrian pavements free from tables and chairs to allow sufficient, far physical distancing of pedestrian movement.
- Providing extra cleaning systems, automatic sterilizing gates, and maintenance.

6.4 Entertainment Findings (Promenading and Relaxation)

The objective of establishing healthy cities is probably accompanied by more effort for building greener cities. Demand for small-sized green areas (district parks) is expected to increase, as residents' resort to such places.

Having such small green areas inside districts helps residents have their daily share of nature. Following this crisis, many cities may reconsider unused areas in cities such as the brownfields and building house roofs (cities have huge numbers of badly equipped, unused roofs which do not give their full potential). Chicago and Barcelona launched an initiative; setting thousands of roofs with only a few turned into roof gardens – designed according to safety rules - as alternatives for public parks. Findings in this regard are:

- Considering safety and needs of the disabled and the elderly – such as seating places.
- Providing places for handwashing and sterilization, and a drainage network.
- Installing big signs at entrances and setting waiting areas there for use when occupancy is high.
- Drawing marks in different places to identify safe interaction domains.

6.5 Urban Place (With Multiple Functions) Findings
Public Gatherings (Parties, Theatre Shows, Protests)

These are places where concerts and cultural events, attracting big crowds, are held. Examples include Zocalo plaza, Mexico City; Tiananmen, Beijing; Madan Plaza, Kyiv; Tahrir Square, Cairo; Gezi Park, Istanbul; as well as several places that were deserted upon the start of the COVID-19 crisis. Findings are:

- Placing temporary traffic obstacles or shutdown signs identifying the type of shutdown and specifying place inlets and exits.
- Conducting regular surveillance operations, particularly during event peak hour, to ensure continuity of safe physical distancing.
- Operators must use data and digital tools to monitor place usage and modify use and access to such places based on need.
- Providing data showing the current number of places, which would allow people to plan their trips more effectively and select alternative places or use places at other times of the day.
- Providing the necessary basic/technological infrastructure.

6.6 Alternative Places/ Places Attached to Public Buildings

- Safe ways/pavements for movement or bicycling paths must be established around the alternative place.
- Coordination with schools and public utilities to identify interfering start times.
- Alternative plans are needed in case of bad weather.
- Places for health providers and handwashing units must be established at entrances.
- Big signs must be placed in specific places.
- If place is used as an alternative classroom, parents, children, and teachers must be surveyed. Also, other surveys must be used for users of any alternative activities to make sure the place is developed in terms of furniture, or other elements that enhance clear vision and sound, as well as enhancing spatial comfort parameters.

7. RESULTS

Design Indicators of Urban Place After Accommodating Some Activities Following The COVID-19 Pandemic: As we have seen in table 7:

7.1 Design Guidelines for Urban Places after Absorbing some Activities during The Corona Pandemic

Table (7): Design indicators of urban place after covid-19 pandemic

Activity	Place determinants	Directors of urban place design	Activity-specific requirements	The World Health Organization (WHO)
Sports (playgrounds, sports halls)	- open places inside neighborhoods or residential districts. - open places attached to buildings (hotels, schools,	**First: Playgrounds** A playground must be divided into separate areas for individual players, abiding by a minimum of 2 m between players.	- Considering standard game requirements in dividing playgrounds, as well as WHO social distances.	

	universities, office buildings).	- Marking such areas with visible colors. **Second: Sports halls** - special marks for each trainer (circles or squares) on open place grounds. - allocating individual units as stated in Table (1) examples.	- distinguishing team members by special colors on uniforms. - providing ventilation units in closed individual training units.	
Commercial, Open markets	- locating some markets based on population data in different planning levels. - open places inside and around neighborhoods, residential districts, commercial streets – following dispersed distribution.	- design of a standard unit including 16 squares with only 3 kiosks to display different types of goods. - specifying one entrance and two exits to control the number of market users.	- appropriate for weekly markets held in Egyptian cities. - appropriate for daily/weekly markets and goods.	
Entertainment (restaurants and cafés)	- open places inside districts and city centers. - places and streets with pavements, attached to buildings (existing restaurants and cafés, commercial, office buildings, hotels)	- Line distribution design, pavement width increased, when possible, to accommodate open restaurant furniture. Reservation via an interactive application.	- places for food trucks following safe distances if no separate buildings for serving food exist. - providing a visual environment stimulating users, through providing simple attractive facilities and green elements.	
Entertainment (promenading and relaxation)	Suburbs and inside residential districts	- social attractions following the 2m distance rule, in the form of circles, squares, or seating places with the same distance.	- providing permanent awareness methods. - providing an interactive application for reserving family places.	
Urban place attached to a building	Urban place attached to a building (office, commercial,	- Control of flow across place by audio/visually attracting attention or via units with sensors,	- if the place is used for meetings, reservation in advance via an application.	

(multiple activities)	cultural, religious, healthcare)	or electronic applications. - providing mobile furniture and basic technological infrastructure arrangements in the place (flexibility of place).	- basic technology infrastructure arrangements within the place.	

Source: by authors, 2020

8.CONCLUSION

This paper reached after studying and analyzing a group of different examples of activities within urban places to some indicators for designing different activities within urban places, that is through the experiences of cities in attempts to achieve spatial distancing while practicing activities, and not to resort to social distancing between individuals, and there are still attempts to experiment in cities with different ways to reach this goal. The most important design trends reached by the research were the resort to open street policy and the use of public places to practice various activities to achieve spatial divergence with social convergence.

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