Post-COVID-19 Implemented Guidelines in Urban Spaces: The case of Alexandria, Egypt

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Abstract- While the world was looking forward for the pandemic to be over, as designers, it is important to rethink the way activities will be carried out then, for it may not be the same. Some activities tend to merge the indoors with the outdoors formulating a datum where people usually socialize in. For instance, the relationship between restaurants/cafes and the outdoor spaces associated with it whether directly connected or served by it in any way. It is predicted that some modifications will be applied on the current strategies of outdoor spaces design in order to adapt to the new lifestyle. This paper aims to analyse some actions observed during the period of the lockdown faced in 2020 in different destinations around the world in order to understand the needs of users at that time. Further studies are carried out to study how to apply those ideas in Egypt in a way coherent with the cultural assets of the society. Finally, this paper will be able to transform an existing urban space into a model of potential to become "the new normal" prototype in Egypt and particularly in Alexandria.

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I. INTRODUCTION

This paper is concerned with the changes that could be applied to urban spaces in times of pandemics. Being able to go out and enjoy oneself is considered an essential need in hard times like this. People in Alexandria were devastated sometimes through the lockdown in 2020 because they had limited choices of where to go for recreation. They also needed to feel safe. This highlighted the lack of urban open spaces in Alexandria. There are a lot of entertainment facilities but not encouraging enough to visit when there is a pandemic. What was observed is the rush of people to enjoy sitting, walking, jogging, or picnicking near the waterfront, considering it was the only open escapism that would accept them at the time. Hence, the need for a space that would embrace the activities people want to do in a safe way.

The purpose of the study is to prepare an applied approach to help solving the problem based on a profound analysis. First, observing how people reacted to the same dilemma in other countries was an important step to define the problem. After constructing the background, a suitable space in Alexandria will be chosen to apply changes on, a space affected by surrounding commercial uses and high demand. Finally, and after analysing the situation before the pandemic, a proposal will be introduced hoping to serve the community more efficiently according to the needs. This proposal also aims to serve the public spaces appropriately for current and future lockdown dilemmas and improve the quality of urban spaces in the city generally.

II. RESEARCH AND BACKGROUND

1) MUSELAB WINS CORONAVIRUS DESIGN COMPETITION

For Muse-LAB's winning proposal, it is essential that each picture unwrapped a modern knowledge into what they were attempting to accomplish. By keeping the plan clear they were able to handle numerous challenges that other plan passages never endeavoured to address. They took on sustainability, health, food safety, reusability, urban design, and indeed trade. The excellence of their design is that indeed although it ambitiously took on numerous components, it remained basic, practical, buildable, and valuable for numerous distinctive types of individuals around the world. This commitment to making a down-to-earth innovation and the designer's ability to show their solution so effectively helped this plan rapidly become the judge's favourite and our choice to win the Coronavirus Plan Competition as it illustrated in figure (01) (Baldwin, June 29, 2020).



Figure 01: the winner proposal for the competition (Courtesy of MuseLAB, 2020).

2) GASTRO SAFE ZONE: A PUBLIC SPACE PROPOSAL THAT CONSIDERS SOCIAL DISTANCING MEASURES

HUA HUA Architects (2020) has created a space grid activity (Figure 02) that changes open spaces into secure and characterized zones, where individuals can eat outdoors without spreading the infection. With the reason of directing exterior eating, the activity calls for participation with specialists for a secure return of the gastro businesses (Harrouk, April 29, 2020).



Figure 02: A public space proposal (Courtesy of HUA HUA Architects, 2020).

2) ROCKWELL GROUP RELEASES DESIGN STRATEGIES FOR OUTSIDE DINING POST COVID-19

"Our hope is that we can create a template that is adaptable for different locations and sidewalk and street environments, and that it will be cost-effective for the city and restaurant owners and also provide potential revenue to offset costs," said the team. Rockwell has taunted up ways to amplify existing restaurants onto the roads and sidewalk (Figure 03).

There are different types of tables and alternative solutions to suit more restaurants which need more space outdoors. The restaurant industry and other partners aim to create extra safety features to further reinforce roadway boundaries. To guarantee convenient implementation. Moreover, significant snow occasions may require the temporary evacuation of a few boundaries from the roadway (Harrouk, June 04, 2020).



Figure 03: Proposals for existed restaurants in NYC (Courtesy of Rockwell Group, 2020).

III. STUDIES AND FINDINGS

Taking Mohamed Naguib square as an urban space in Alexandria, Egypt gives a chance to provide a proposal for it as an urban space with alternative activities according to the previous case studies and distance regulations after Covid-19. It is located at the western north end of Mohamed Naguib Street which links between El-Gaish road and Malak Hefney Road as it is illustrated in figure (04).

A. The Selected site in its current condition

Mohamed Naguib square is located in a significant location. It has a wonderful view of the waterfront and different services around it. Furthermore, various activities happen in Mohamed Naguib square with no determinations or regulations such as ceremonies, street markets in summer, or acting as an extension for the coffee shops there. However, activities are not encouraged in this area during Covid-19 pandemic.

This square has an appropriate potential to be a major urban space in Alexandria not only for Mohamed Naguib district's residents but also for the whole city. Figure (04) shows the status of the square in December 2020.



..... Case study boundary

The actual urban space boundary

Random parking takes the space

- - - Edges by streets

Figure 04: Satellite Map for Mohamed Naguib square (source: Google Earth, 2020).



Figure 05: Mohamed Naguib square Situation before the pandemic and it did not witness changes since then. (source: The researchers, August,2020).

Figure 06: Mohamed Naguib square Situation (source: Internet Picture, 2020).

B. preparation of the site for the study

In order to start constructing the space in terms of urban design elements, it should be clearly defined. The first step made addressing this matter is solving vehicular circulation problems around the square. Several walks were taken in the area to analyse these problems. Interventions included defining lanes and U-turns as well as islands. The square is then defined as the hatched area shown in figure (07) representing an area of approximately 8160 m2. This area is the main datum of the idea that aims to enclose the introduced activities during and after the pandemic.



Figure 07: The initial base plan of the urban space showing the area under study (source: the researchers, December, 2020).

IV. URBAN DESIGN PROPOSAL FOR THE SELECTED SITE

The space suffers from some problems that need to be solved. First, the congestion caused by vehicular presence within its boundaries. This vehicular presence may be parked cars that take up large areas as illustrated in figure (04) or conflicted vehicular circulation all around. Second, the organization of urban activities according to the new outlines. These solutions will be explained in the following sections, divided up into phases.

A. Phase one: parking problem solution

Concerning the vehicular problems, specifically the parking spaces that need to be provided in the first place and not just being improved. The plan in figure (08) proposes a basement level accessed from northern and southern streets. It is supposed to be sufficient for 80-100 cars, which is adequate to solve the problem of on-street parking. It also cancels the need for parallel parking in front of the commercial building. This can allow the extension of sidewalks for urban amenities without being blocked by cars.



Figure 08: The proposed basement plan (scale 1:1000) that should occupy about 80 cars. (source: the researchers, January,2021).

A. Phase two: urban spaces solutions

Given figure (09), the design of the urban space mainly includes a hierarchy of levels in which people interact with. One of the main aims addressed in this proposal is the ease of accessibility, where the plazas, that will be explained in detail in following sections, are accessed by steps and ramps almost from all the surrounding edges. The perception of the space aspires to be welcoming and inviting when seen from a distance. Hence, the introduction of friendly steps integrated with green elements. The plazas are meant to serve the commercial uses of the district (restaurants and cafes mostly). Street vendors are welcomed in kiosks while applying the proper distances needed for service and circulation as well as a seating area according to the applied measurements. Spaces are mostly passive encouraging people to do whatever they like while unconsciously controlling their distancing. For example, the use of fixed furniture makes seating spacing mandatory to be followed. Another implementation is the definition of use spaces by pavement patterns and separations by soft landscape elements.



Figure 09: The proposed plan, scale 1:1000. (source: the researchers, January,2021).

V. DIAGRAMS FOR GIVEN PROPOSED PLAN

The given diagrams below in figure (10), figure (11) and figure (12), show the two main plazas and the various activities at them. They also show circulations zones, and the dimensions guides among the fixed furniture in the two plazas. The first diagram represents the relation between the selected site, the Mediterranean Sea, and the Corniche Road and how it is treated in their site by a public transportation drop-off.



Figure 10: The proposed plan diagram, scale 1:1500. (Source: the researchers, January, 2021).

The design used a fixed grid which was the key to social distancing in the spaces. Different seating layouts can be adapted onto this grid to ensure its purpose. All the used furniture is fixed so that the layout should be respected. The seating layouts vary to accommodate individuals, friends and families. The same grid modules also serve the circulation between these layouts as shown is figures (11) and (12).



Figure 11: Fixed sitting area detailed diagram, scale 1:500



Figure 12: Upper Plaza detailed diagram, scale 1:500

VI. CONCLUSION

Given this research, Urban Design proves to be a flexible field of study. The new guidelines can be easily introduced into urban spaces whether existing or new. The designs involve simple interventions which people tended to formulate themselves in order to stay safe. In case of any similar situations, spaces will be ready to face it in the future. Generally, thanks to all the work done through this time to improve urban spaces, a wide set of regulated designs are acute to be set forward.

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