

SOCIAL NETWORK PROGRAMS AND REDESIGN OF URBAN PLACES FOR PEDESTRIANS–STUDY OF KHEDIVAL CAIRO DOWNTOWN

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Abstract

New media and communication technologies already impact on many aspects of everyday life including work, home and leisure. These new technologies are influencing the way that we develop social networks; understand places and location. The paper presents the initial findings of the impacts that digital communication technologies are having on public urban spaces and types of activities, which will improve the quality of the pedestrian's environment within urban places.

khedivial Cairo downtown public spaces are chosen as a case study, its public spaces and streets has been in public attention for many years and were serving for various generations of public life. It will be very important to study how these modern forms of connecting can influence the social interaction in well established and centrally located public spaces.

The paper will adopt methods such as questionnaire, online question form and personal observations, such collections of data are required to get various opinions from public. This will enrich the understanding on how new information techniques will set new requirements for furnishing public spaces.

Finally, the paper will present a design proposal for a certain urban space that aim to satisfy the needs of users of the modern generation and seek to influence the people flow by virtual social media The scope of this research is to find a design principle that can be adopted in design of public space for the contemporary users with the new concepts of social life.

Keywords: Urban place , social networking, Khedivial Cairo, social interaction, digital place making

1. INTRODUCTION

Social networking through web based facilities such as Facebook, MySpace, Twitter and Friendster, even planners' networks like Planet citizen or Project for Public Places (PPS, 2008) encourage and support the development of virtual communities, many of which are based on physical communities too. With the mobile internet interface these social networking tools can be even more instantaneous and interactive real time.

Over the last decade, significant changes both in terms of social interaction and public behavior have occurred as a result of the increased use of mobile technologies. Khedivial Cairo downtown with all its unique urban spaces patterns and street morphology were chosen as a case study to presents the research proposed design approach. The paper will explore the major impact of technology and social networking programs on urban space use through addressing these points:

- Definition of social media, and what are the different applications of technology in the space ?
- Urban spaces and types of social interactions and activities.
- Brief history of case study location, and applying comparative and individual analysis.
- The design proposal of selected urban space, with a conceptual furniture design.
- Major findings and recommendations.

2. Social media and social networking

Social media has been defined multiple times in the literature by researchers, industry and individual experts. It can be defined as service which enables to share various news, information, opinion in ways of multimedia. Social media sites are establishes with contents about any information with videos and pictures. Social digital networking is a sub category of social media by which people are able to connect with one another and share information globally. This advancement leads to various activities, discussion and gives possibility to interact (Hosio, 2009).

There is popularity for virtual spaces such as web which is satisfying the criteria to meet and interact such as traditional public space that leads to new identity of urban life (Aurigi, 2005). These new concepts are growing to satisfy the public needs on time to time but it can be argued whether these technology of connecting virtually by telecommunication and virtual world (internet) are trying to prevent face to face meetings in physical.

It is estimated that 3.3 billion Mobile phone users around the world are internet surfers according the New York Times (Shannon, 2008). The possibilities of being connected in the networks are increased because of the portability. It creates the continuity of staying in the network for various discussions and helps to meet. This explores the usage of mobile networking for social interaction in public spaces for physical meeting (Humphreys, 2010). Fig. 1 below depicts how various communities can interact and have social connections.

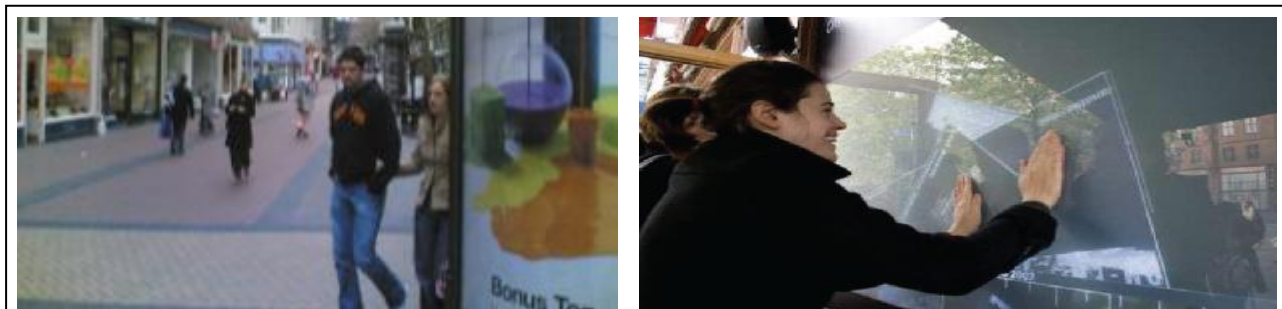


Fig. 1. Virtual social connection. (www.socialmediaxaminar.com)

2.1 Advertizing media in public spaces

Advertisement media is very important to gain public interest in urban squares; this gives a visual impact to attract more people for shopping in such spaces. There is different ways of exhibiting the products such as signboards or advertisement panel on the building. Banners, stickers, signboards are common ways of exhibiting the products.

Technological outcome of these advertising boards are replaced with visual interaction panels. These are installed in public space where people can interact by touching their surface of the screen; this is called as "City wall". These are large multi touch display are installed in Helsinki, Finland (Morrison et al., 2008). The reason to make this attempt is to gather people in public space. Creating such attractive feature with these new technologies is awakening the people to bring back the glory of using public space in this modern world.



Advertise panel in public space (the researcher)

Public interacting surface in Finland (Morrison et al, 2008)

Fig. 2. Advertizing media samples in public spaces

2.2 Wi-Fi and social network

The experience of wireless Internet use in the public realm contrasts with traditional wired Internet use, which is confined primarily to the private realm of the home and the parochial realm of the workplace. An extensive literature has addressed the influence of Internet use on the composition of people's social networks (Boase et al, 2006), their engagement in political, voluntary, and other organizational activities (Shah et al, 2005), and their interactions within home and workplaces (Kennedy & Wellman, 2007). But, Internet use in the public realm has remained relatively unexplored. This type of use carries with it significant implications for urban planning, the structure of community, and the nature of democracy in the space.

The upsurge in Internet access in public spaces may reshape the public realm. Because of its location, it may revitalize, repopulate, and improve the safety of public spaces. Because of the electronic connectivity it offers, it may reduce social inequalities and increase the use of public spaces. As a result of the diversity of those who are co present, it may increase social cohesion, tolerance, and exposure to diverse messages (Hampton et al, 2010).

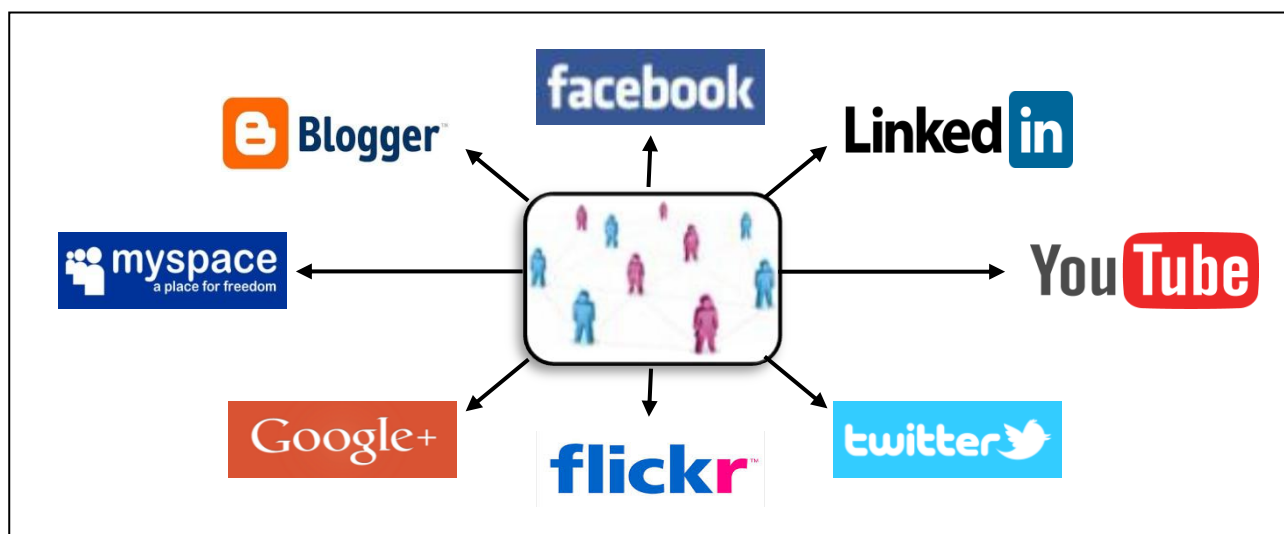


Fig. 3. Multi social networking programs affecting people's life (the researcher)

3. Urban space and social interaction

The people in the society are reacting to existing form of public space, thus the usage of urban space is related to the materials available in public space. Designer creates potential environments but people can create effective environments (Carmona et al., 2010). There is a need for public space for social interaction from historical time; this always gets uplift after some period of time according to the feature presented in the urban square. Public space is in a form of transition according to the people's behavior from time to time.

Public spaces serve as an important site of human social interaction with all different kind of activities. According to Carr et al. (Carr,1992): 'Public places afford casual encounters in the course of daily life that can bind people together and give their lives meaning and power.' Urban spaces allow people to gather and socialize away from home and daily work.

Jan Gehl raises a question that "can the function of cityscape can be taken over by electronic media such as TV, internet, mobile technology" Social life have changed in different form but the real quality is face to face meeting, unpredictable meeting experience, those are the quality of cities meeting place (Gehl, 2010). These media are indirect communications that are used as secondary ways to connect more people for the meeting. Many social changes occur in this modern world but even then there is always an increase in interest in staying outside in common public space.

3.1 Physical and social spaces

The idea that space is interdependent with social relationships is not new. The notion has been present in sociology since the inception of the urban ecology theories of the Chicago School. While theorists recognize space as socially created, they seem to treat place as some independently existing condition of location. Reading commentaries on the "experience of place," (Hiss 1990) however, it becomes apparent that place is also socially created, emerging from the social definition of space.

3.2 Public space and gathering place

Public places are places where citizens neither sleep nor work, they are third places. Open-air living room or outdoor leisure centre where people meet different people, share experience and learn to trust another. New unacquainted places can create emotions of curiosity, uncertainty or insecurity (Florida 2011). Holland et al writes about time usage of space. That it's easiest to get people out for a lunch at a square or café, hardest to get people out at mornings or staying in winter or rain. Her observations show that the flow of walking people peaks before 9am, 12am-2pm, and after 4pm, clearly in relation to working times, at other times less people but more leisure and longer stays. (Holland, 2007)

3.3 Optional/social activities and networking programs

According to Gehl, if the physical environment Quality is high, there is an increase in use of optional activities and social activities (Gehl, 2010). This paper focuses on such activities to find out the ways of increase the quality of public space with the Digital social networking. People are connected virtually by the social networking thus this idea has a possibility to create a space for people to interact in public places. Public squares and its usage are getting updated at every generation by the technology and ideas which people are overwhelmed. People are involved in place making process.

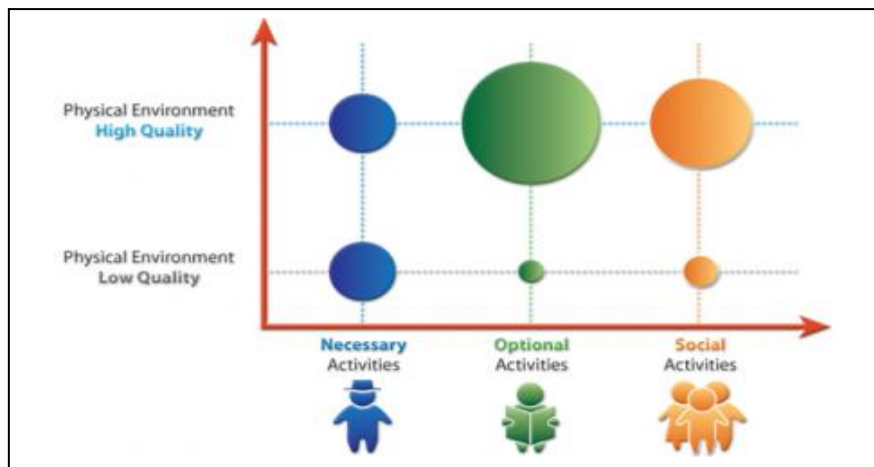





Fig. 4. Different types of outdoor activities. (Gehl, 2010)

Table 1 shows the detailed description of each type of activities in urban space, to illustrate why the paper will focus on last two types.

Table 1. Description of different types of activities. (the researcher)

| Type of activity | | Detailed description |
|------------------|---|---|
| Necessary |  | <i>When it comes to Necessary Activities, the quality of the physical environment does not matter. You have to go to the bank or to the grocery store and you're going to regardless of the quality of the built environment. You have to.</i> |
| Optional |  | <i>Optional Activities are things like stopping to read the newspaper, sip on a cup of coffee, visit with a friend, people watch, etc. These types of activities take place in high quality environments because people don't like to hang out in low quality places.</i> |
| Social |  | <i>Places that support optional activities foster Social Activities, which is what good urban design is all about. Many urban designers say the mark of a successful urban space is its ability to support socialization or sociability.</i> |

4. Case study of Khedivial Cairo

Now located within a city of 17 million persons, the urban structure of 19th century Khedivial Cairo was planned when the city's population consisted of only 350,000 people. The metabolism of Cairo has since evolved, along with its structures of social and economic exchange, transportation, urban ecology and its imagination or comprehensibility. (Abdel Sabour, 2013)

After the 1952 revolution, the district started to lose its fine polished urban qualities as a result of policies that forced land reforms and intensive and unsympathetic construction. Historic buildings were subject to rent freezes, leaving little capital for maintenance and repair. This led to the rapid deterioration of several buildings (Amedi, 2009). Since 1992, downtown Cairo has been subject to many efforts aiming at heritage conservation and improvement of the urban environment. Most of the efforts whether governmental, or academic, were oriented towards documenting and listing (Attia, 2013). Recently in 2010, General Organization for Physical Planning in Cairo (GOPP) developed a Strategic Urban Development Plan for Greater Cairo Region, khedivial Cairo downtown was on top of priority projects to start with in a form of international competition for revitalization and urban development, Fig. 5 shows the winning project.



Fig. 5. The revitalization of Khedivial Cairo, Winning prize of khedivial Cairo competition in 2010. (Attia, 2013)

4.1 Social media and 2011 revolution in Egypt

The role of social media tools in the period of protests in January 2011 were huge. To outline the roles of social media within the Egyptian uprising, it can be based on three identifiable trends: social media as an organizational tool, as an alternative press and outlet for citizen journalism, and finally as a tool for generating awareness both regionally and internationally.

Substantial access to social media among Egyptians was available largely because of government efforts to expand the nation's information technology capabilities as a tool for socioeconomic development (Hamdy, 2009). Because of the central location of Tahrir Square - the main gate to khedivial Cairo-, it has been the traditional site for numerous major protests and demonstrations over the years (Nassar, 2013). Therefore, it was the main gathering point used by the protesters through social networking programs.

4.2 Comparative and individual analysis

The research conducted a questionnaire for the users in Cairo downtown, it was framed to extract the opinion of people about public interaction and the relation between social activities and networking programs. According to Jan Gehl (Gehl,2010), when the physical environment Quality is high, there is an increase of optional activities and social activities, this part will focus on such activities to find out the ways of increase the visual qualities of public space with the digital social networking where people are connected virtually. 75 candidates were chosen randomly, they were desinged to be all around the downtown area to explore the most desirable urban places. The times spend on the site for questionnaires were between 3.00 pm – 9.00 pm, to avoid the people using the spaces for nessecesary activities, such as going to work or visiting govenmental buildings or banks in the area, distributed on weekends and weekdays (Date: 21th to 25th May 2014). The users survey was divided into main parts to examine the previous discussed points in this paper, these parts are:

1. General questions using technology (carrying phones, laptops and using social networks programs).
2. Social life of the spaces (best place to visit, reason to visit, time spent, desirable and wanted activities).
3. Place design and furniture (noise level, seating area and shelters).

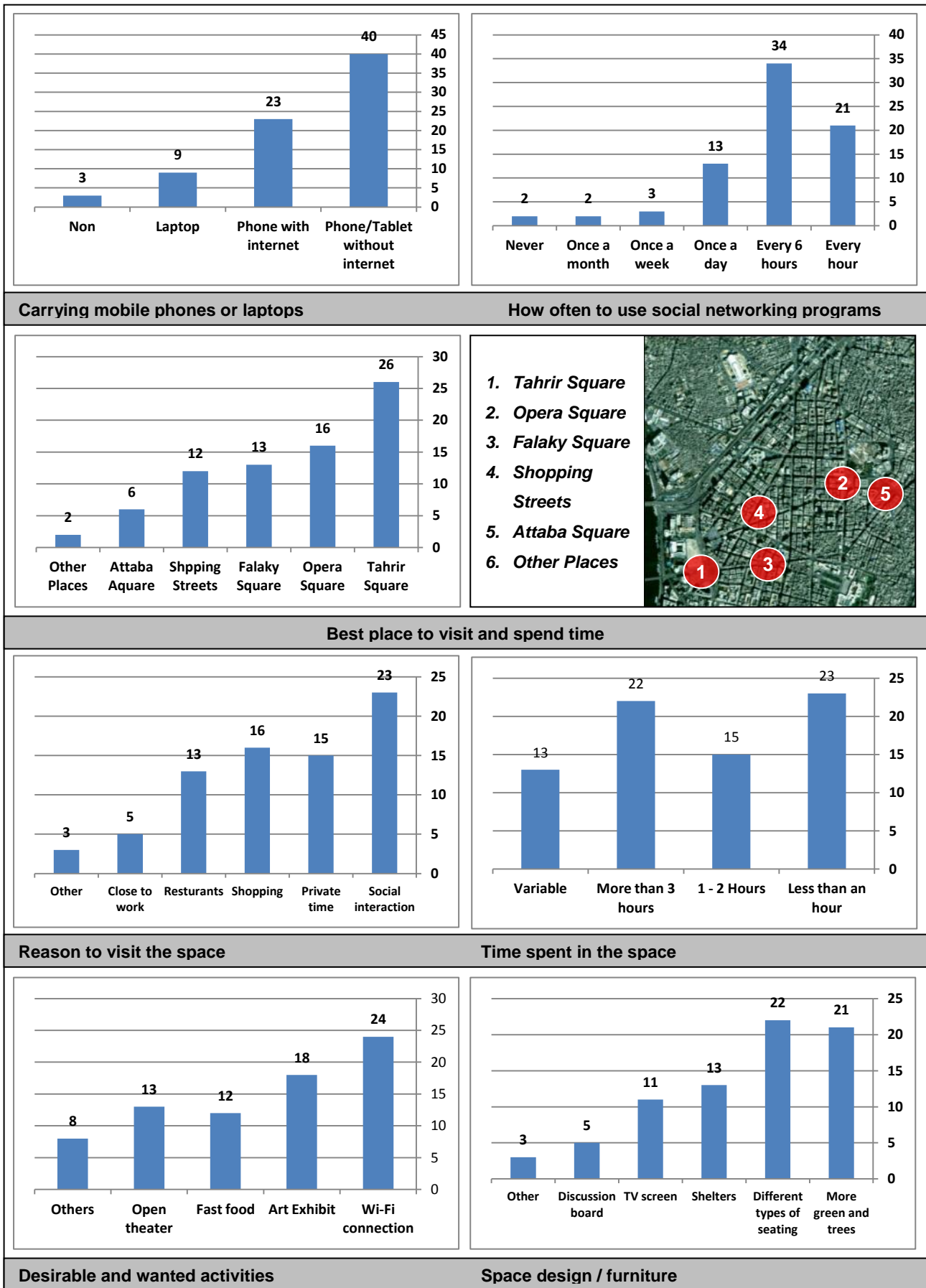


Fig. 6. Questionnaire results for the Khedivial Cairo users. (the researcher)

Fig. 6 shows the results of users surveys in Cairo downtown, From the comparative analysis to the results, some important points can be listed as:

- Most users in the urban spaces were between 17 and 45 aged people.
- The people choose the urban space according to the services (restaurants, coffees, shopping areas).
- Mobile phones users likes to connect with internet at least every one hour.
- They prefer to stay in coffees to use the Wi-Fi internet.
- There is a great need for different social types of seating areas to hold the desirable activities.

4.3 Urban space selection

After analyzing the collected data and information from users surveys, the following step is to understand the people needs and redesign a site in a way to satisfy their needs, with respect to the existing surrounding and enhance the people flow in and around the public space. The paper sets up the criteria for selecting the site location based on:

- The most desirable place for users to spend time and socialize.
- Closeness to public transport and collective services.
- An average area of not less than 400 m², to have the potential for redesign the furniture and enhancing different types of social activities.
- Having exposure to the public to attract more types of users.

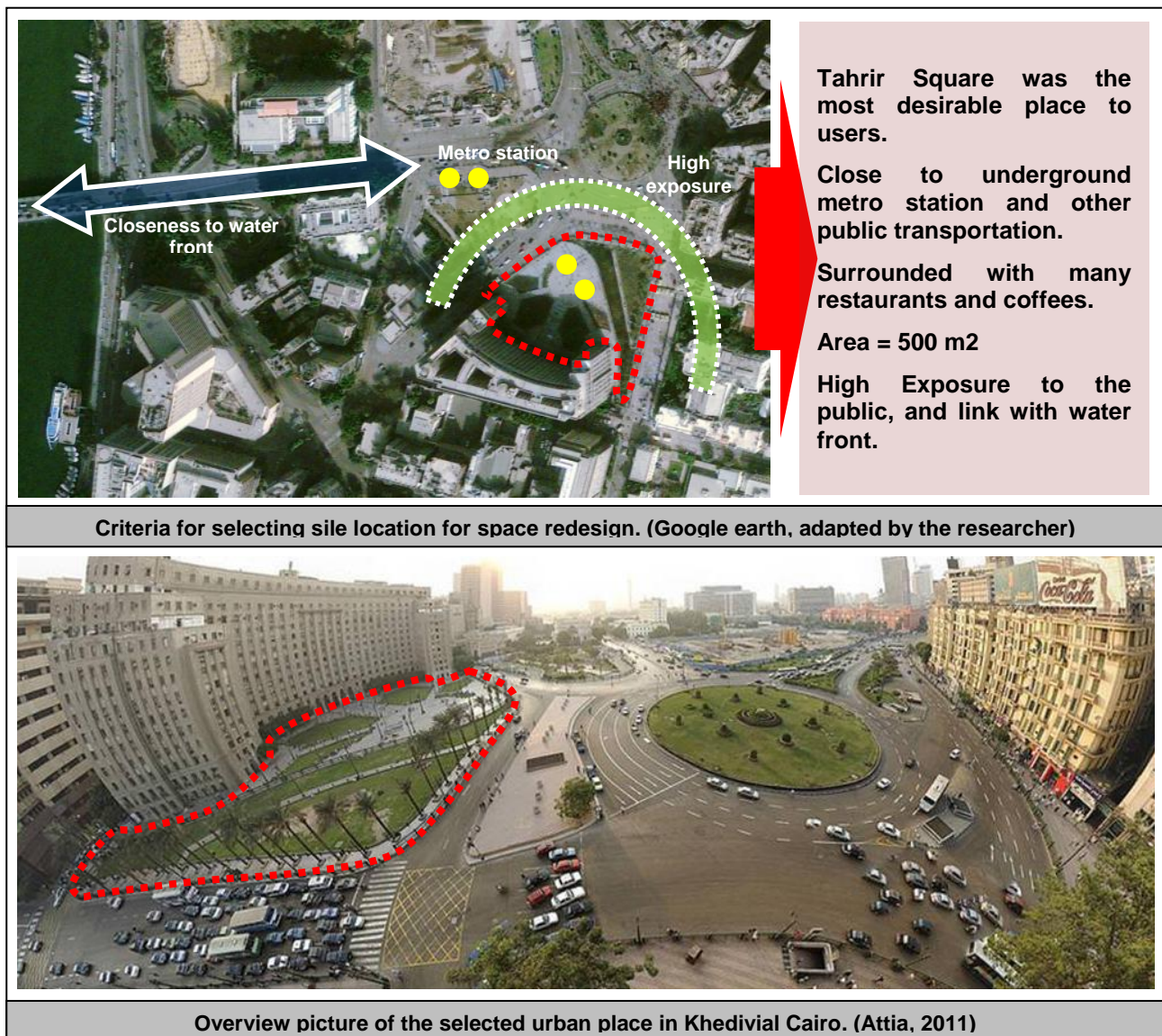


Fig. 7. Location of study area in Khedivial Cairo (Tahrir Square).

4.4 Proposed urban design plan

4.4.1 Surrounding uses and movement analysis

Based on observation, the study area in Tahrir Square seems to be the most lively spot in the square. Many users use it as a transition place to use the metro, or a starting meeting point for social gathering, See Fig. 8

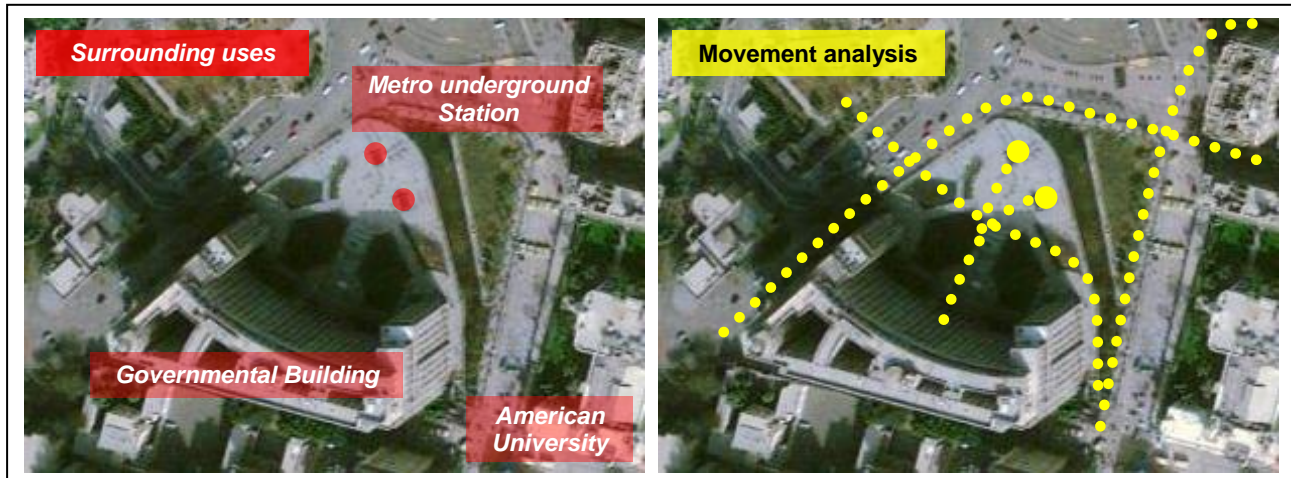


Fig. 8. Existing current uses and movement analysis. (the researcher)

4.4.2 Design strategy

There are certain key points needs to considered while designing the public space such as:

- Public space needs to maintain its identity and cope with the new trends in technology.
- Shaded shelters and informal seating types to be defined to various users.
- Creating spaces for optional activities.
- Attracting people with wireless internet facilities, and unique designed elements.
- Controlling noise level from surrounding streets.

4.4.3 Design concept

Fig. 9,10 shows the proposed urban design for the space and its analysis, taking into account all the user's needs derived from observation and questionnaire, and to enhance the new application of technology.

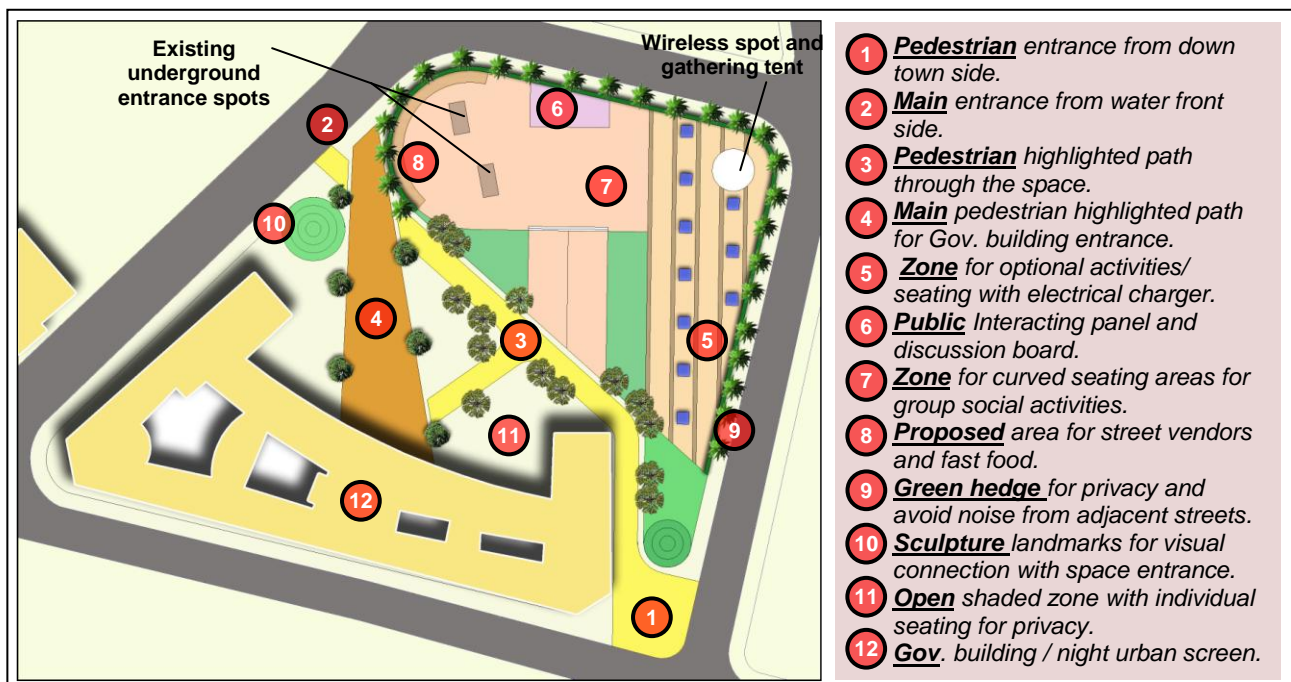


Fig. 9. Proposed design plan for the selected urban place. (the researcher)

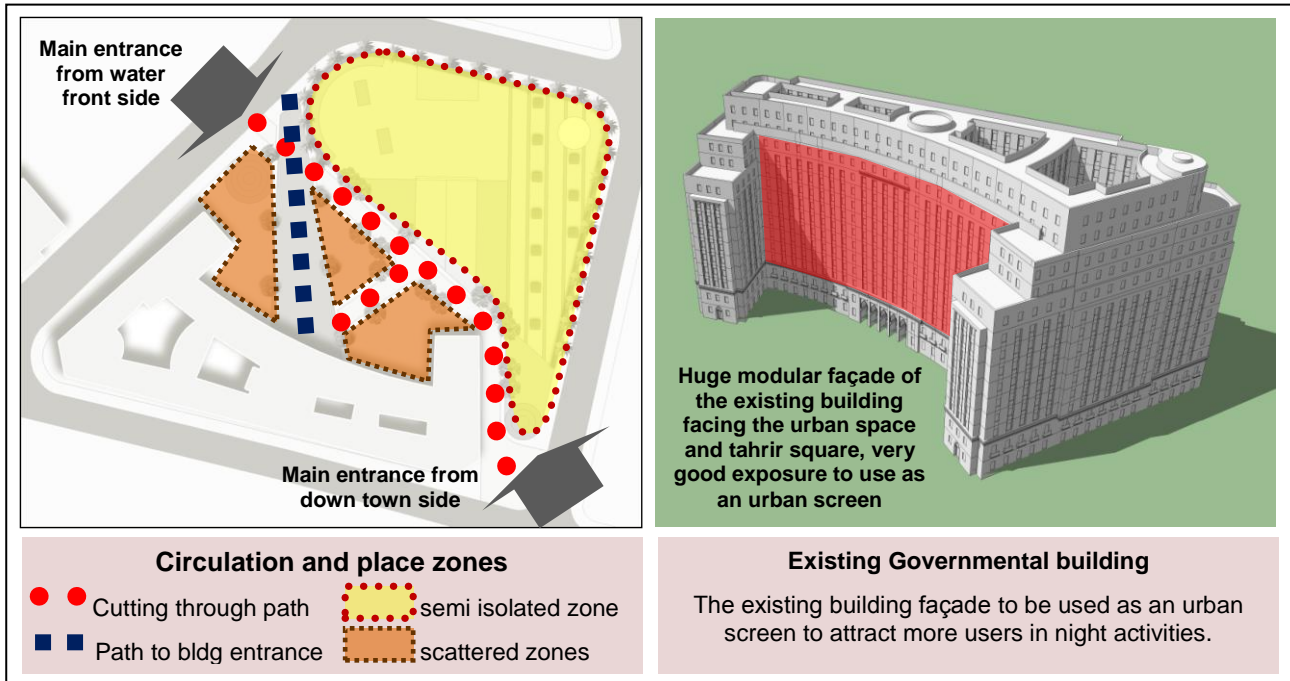
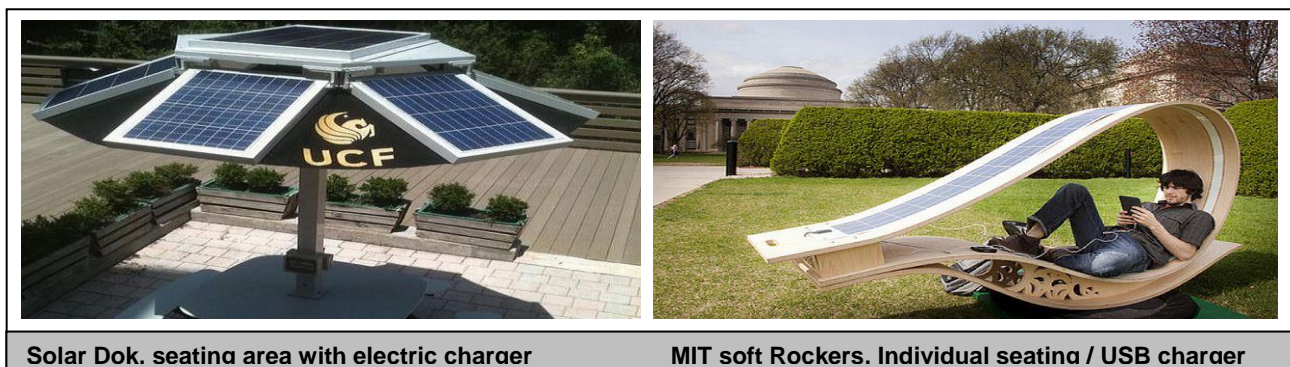


Fig. 10. Analysis of the proposed design (the researcher)

5. Major findings and recommendations

In essence, it is important to understand both the rooted connections to the past and the current forces responsible for the shaping of physical built form, together with the social processes and cultural expressions that give a community its permeability, in order to establish a particular kind of identity in digitally networked urban environments. The paper major findings can be listed as:

- Contemporary urban design approaches and policy needs to be reflexive to this continual transformation and development of network, products and patterns of user behavior so that the physical-digital urban spatial nexus can continue to 'refresh' itself.
- People of ages between 15 to 45 are comfortable with using all social networking programs to stay connected with their friends. Thus, it is very important to adopt wireless internet facilities and different informal seating types to cope with their needs.
- The concept of visual interaction panel and using building facades as a urban screen allowing more types of users to interact with the space and connect with people.
- Carrying smart phones and laptops are becoming necessary for a wide range of users for many reasons, varying between education, leisure, business and entertainment. Hence, it will be more convenient for them to find a place in urban spaces to enhance their needs. Fig. 11
- An infrastructure for wireless Internet connectivity within urban public spaces may have unanticipated and positive consequences for users in the public sphere beyond what could have previously been afforded by urban public spaces that are free of Internet connectivity.



Solar Dok. seating area with electric charger

MIT soft Rockers. Individual seating / USB charger

Fig. 11. Recommended urban design furniture to adapt the interaction between people and technology (Prasad, 2012)

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