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ORIGINAL STUDY

Critical Review of Building Usability in Historic Cairo

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Abstract

The value of heritage buildings and their surroundings has developed due to the change of the first functional purpose for which they were built. Many old heritage areas as well as the urban surroundings of the old seat of government such as Salah El-Din Citadel in Cairo suffer from neglect and increasing deterioration of their urban settings. The study aims to formulate an integrated urban strategy to help the conservation of the historic seats of government buildings and their surroundings to adapt to new functions and developed land use. The selected case of the study is Salah El-Din Square in Historic Cairo. To attain its aims, the study analyzes three building types in the study zone that need conservation and reuse. The paper develops an approach to track and assess causes and consequences. It explores the prospective scenarios of heritage restoration and appropriating new functions that ensure sustainable conservation of the site.

Keywords: Conservation, Heritage sites, Historic Cairo, Tangible and intangible cultures

1. Introduction

Feritage sites defined as the homogeneous urban spaces that include a group of heritage vocabulary, as they are areas with homogeneity in their urban features containing values expressing the characteristics of society, so we find urban values in addition to social customs and traditions. Heritage sites include cities and neighborhoods of historical, archaeological, artistic, scientific, and social importance with all their components of urban fabric, public squares, roads, alleys, infrastructure, etc., and they are represented in cities that witnessed an urban development crowded with heritage buildings, such as Cairo, for example (Darwish, 2019). The heritage of tangible and intangible heritage assets of a group or society are inherited from past generations. Not all heritages of past generations are 'heritage'; rather, heritage is a product of selection by society (Logan, 2007). Cultural heritage includes tangible culture (such as buildings, monuments, landscapes, archive materials, books, works

of art, and artifacts), intangible culture (such as folklore, traditions, language, and knowledge), and natural heritage (including culturally significant landscapes, and biodiversity) (Sullivan, 2016).

1.1. Statement of the problem

The seat of government and its surrounding zone attracts important buildings of several types belonging to the senior state men who prefer being close to state headquarters, According to the several moves of the seat of government in Cairo city, the surrounding zones of the former seats of government suffer from negligence through the inappropriate re-use of the existing buildings and the whole site.

The urban surroundings of Salah El-Din Citadel in Cairo as the old seat of government include many important buildings as Mosques and Palaces of Sultans and Ministers, other buildings represent the former ruling systems and related to intangible cultural activities that had part then, like Al-Mahmal Kiosk (the building of Kaaba covering

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procession) and the Mausoleum of Prince Mangak Al-Yusufi that provided the pilgrims with water, the two examples represent the types of buildings that lost their original functions and also with their surroundings suffer from negligence. There are also buildings erected after the seat of headquarter was moved that do not match with the common architectural styles of the buildings in the study zone likes the economic housing blocks next to Sultan Hassan Mausoleum.

The study argues that the upgrading of the deteriorated zones surrounding the old seats of government in historic Cairo city can be approached by the revival of the existing old historic building with new functions related to their original functions. In the case of Istanbul city with upgrading the historic buildings and areas after the capital was moved to Ankara city (Kuyucu, 2010).

1.2. Research aims

The study aims to develop a strategy for suitable reuse of the neglected historic buildings representing tangible heritage, by the revival of the intangible cultural activities related to these buildings and the region.

1.3. Research questions

The questions are raised about the subsequent controversies over reuse and renovation of historic buildings and areas and the urban plans for the site, and the urban interaction to future global city functions.

- (1) What are the suitable strategies for upgrading deteriorated historic sites?
- (2) Which cases of buildings in need for reuse, and what are the appropriate functions?
- (3) What are the rules of governmental, nongovernmental, social sectors in the process of upgrading the case study?

1.4. Methodology

As shown in Fig. 1, the first two steps is to realize the vision including observation for the old and the current situations for the study location through review of the district of Salah El-Din square in historic Cairo as it was the seat of government before and the attached buildings that lost their original functions by the movement of the seat of government, and in third step the study analyses the cases of the demolished buildings, buildings replaced with others of different functions, neglected buildings, and buildings used with inappropriate functions. Last step is to setting upgrading strategy for the case study.

2. Case study analysis

(1) The location of the seat of government changed several times in Cairo city from 641 to 1952. The transfer of the seat of government was always accompanied by the transfer of all associated buildings. The study focuses on the Citadel's district that included the seat of government from the 13th to the 19th centuries, and the remained associated buildings that lost their original functions and how can these buildings reuse with appropriate functions. There are many monuments like Mausoleum of Sultan Hassan, Al-Rifa'i Mosque, House of architecture, etc., authors selected, neglected, and deteriorated buildings lying in the path of Hajj procession. Three buildings are selected which are Al-Mahmal Kiosk, Housing Blocks close to the Madrasa of Sultan Hassan, and Mausoleum of Prince Mangak Al-Yusufi.

2.1. Cairo city as a capital

The Muslim rulers built their capital in the geographic Center of Egypt (Alisa, 2015). Cairo is

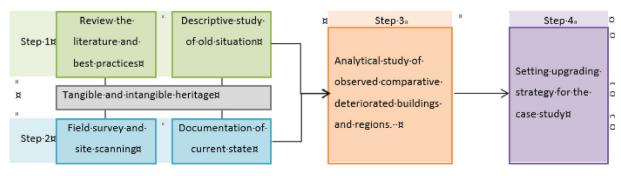


Fig. 1. The methodology steps of the study (authors).

the capital of Egypt and one of the most prominent cities of the Islamic world.

The modern town is composed of the remains of four cities established in this area during the early Islamic period (Petersen, 2002).

Fig. 2 shows the borders of historic Cairo (the red color shows the world heritage property and the yellow color shows world heritage property's buffer zone).

2.2. Former capitals of old Cairo

Al-Fustat (641–750) was founded as a military camp city to the north of Coptic Cairo and became a regional center of Islam and home to the first mosque in Egypt Amr Ibn Al-'As Mosque.

Al-Askar (750–686) when the Abbasid Caliphate ruled Egypt, the capital was moved to the north to their military camp city.

Al-Qata'i (868–969) under the Tulunids, the capital of Egypt was moved further north to another settlement.

Al-Qahira (696–1167) the Fatimid capital placed in the North of all previous cities (Abdelmonem, 2017).

Al-Qahira during the Ayyubid, Mamluk and Ottoman periods the Ayyubid Sultan Salah Al-Din

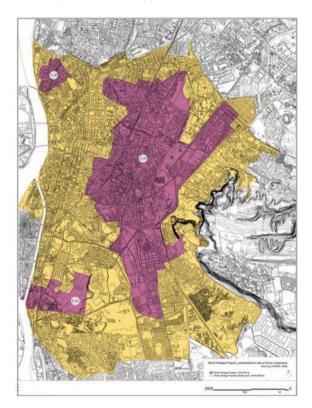


Fig. 2. Map showing the Borders of Historic Cairo. (Source: F. Miglioli, D. Pini, and E. Al, 'Urban regeneration project for historic Cairo final report on the activities.' UNESCO World Heritage centre, management of World Heritage Sites in Egypt, 2014).

planned to unite the city by enclosing both Fustat and Al-Qahira in massive walls. During the Mamluk and Ottoman periods the city continued to grow with suburbs growing up around the citadel and Al-Qahira and huge cemeteries extending east and west into the desert (Petersen, 2002). (The map of former capitals of old Cairo shown in Fig. 3).

2.3. The urban importance of case study location

The Citadel of Cairo is a medieval fortification, built during the Ayyubid era by Sultan Salah El-Din (Saladin). It was the seat of government in Egypt and the residence of its rulers for nearly 700 years from the 13th to the 19th centuries. The Citadel was built on a promontory beneath the Mukattam Hills, a setting that made it difficult to attack (Raymond, 2001).

Situated just beneath the Citadel, Salah al-Din Square (or Maydan al-Qal'a 'Citadel Square') is considered one of the most important historical squares in Cairo.

The Mamluk Sultan Muhammad Ibn Qalawun renovated the square, since it served as a polo court for him and his princes. During his reign, the Square was the venue for the prayers of the two most important Islamic festivals, Eid Al-Fitr and Eid Al-Adha. Ibn Qalawun also used the square as a reception area for ambassadors and foreign envoys, as well as a hall for celebrations and military parades.

The square overlooks number of Islamic monuments like: the Citadel of Salah al-Din which opens

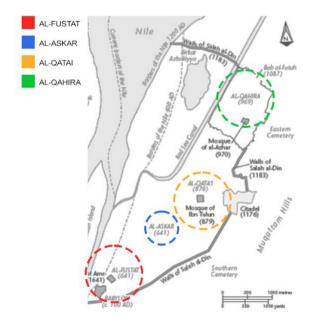


Fig. 3. Map of the former Capitals of old Cairo. (Processed by the authors from Cairo: Histories of a City, Nizar Al-Sayyad).

onto the square by Bab Al-Azzab, Al-Mahmudiyya Mosque, Mosque and Madrasa of Al-Sultan Hasan and Al-Rifa'i Mosque. Several streets branch out from the Salah Al-Din Square, including Souq Al-Silah, Seket Al-Mahgar, and it also was the starting point for the Hajj procession (Ministry of Tourism and Antiquities).

(Fig. 4 shows the study location in the tourist map of Cairo city).

2.4. The intangible heritage in the site

2.4.1. Hajj procession

The site represents the start point where the Mahmal passes. That was an annual procession from Egypt to Hijaz (Saudi Arabia), where Egypt hands the Keswa, or the new cover of the Kaaba carried on camelback, to Hijaz. During the Ottoman era, the procession's caravan would pass by El-Hattaba district that housed several Keswa workshops. El-Hattaba also offered water reservoirs for Hajj and Mahmal caravans that would rest through

the night in open areas near the cemeteries (Ahramonline, 2011).

2.4.2. Traditional crafts

The area is the centre for two crafts, one is Aqadeen (a special kind of embroidery that requires a spacious area to spread its thread). The other is the shell handicraft, especially on wooden material (Noshokaty).

2.4.3. Mulids

Cairo is famous for its Mulids, festivals associated with holy men and women that have been celebrated since the Fatimid era. The purpose of Mulid is to glorify God by honoring one of his favorites. Husayn the grandson of Prophet Mohammad and other descendants of the Prophet are buried in the city and venerated together with holy men in processions of some times hundreds of thousands of people through the historic city (Antoniou, 2002). People celebrate Al-Rifa'i Mulid, a Sufigathering which commemorates the birth of the

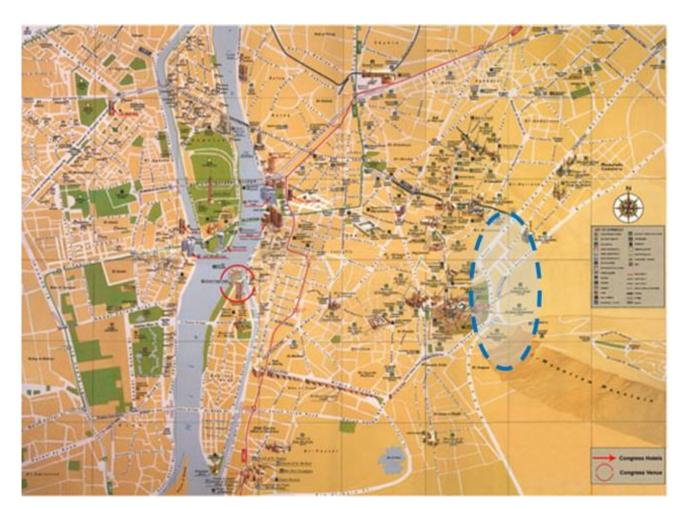


Fig. 4. Tourist map of Cairo City Showing the Study location (Source: https://www.egyptpyramidstours.com/egypt-maps/, accessed on Feb. 9, 2023).

Muslim Sufi spiritual leader Ahmed Al-Rifa'i, in Cairo, Egypt, The event attracts thousands of Muslims on March 16 from all over the country to the mosque and shrine named after him (Gettyimages).

2.5. Neglected buildings related to intangible heritage

Authors selected neglected and deteriorated buildings lying in the path of Hajj procession, three buildings are selected:

(1) Al-Mahmal Kiosk (the building of Kaaba covering procession):

Al-Mahmal Kiosk as it represented the starting point for the procession.

(2) Economic housing blocks close to the Madrasa of Sultan Hassan:

The housing blocks overlook the procession and lies in a great historic site, while their architectural design does not match with urban surroundings.

(3) Mausoleum of Prince Mangak Al-Yusufi Mausoleum:

Mausoleum of Prince Mangak had rule in the event as it includes Sahrij (reservoirs) beneath the complex where drinking water supplies for pilgrims.

(Fig. 5 shows the region and the buildings of case study, and the Hajj procession path).

2.5.1. AL-Mahmal kiosk

This building was erected for the Khedive and his Ministers when receiving the Mahmal, which looks like an open-air stage, It stands far down under the Citadel (as shown in Fig. 6), the upper part of which is occupied by the Market and Meidan Rumeleh. This position is magnificent for thousands of people can be accommodated in this huge open space, and its surroundings make such a noble background foe pageant (Sladen, 1911).



Fig. 6. The current situation of Al-Mahmal kiosk. (source: the authors).

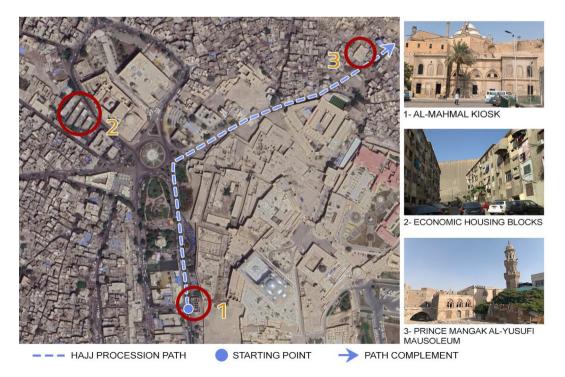


Fig. 5. Case study selection (source: the authors-based on a Google Earth map on February 13, 2023).

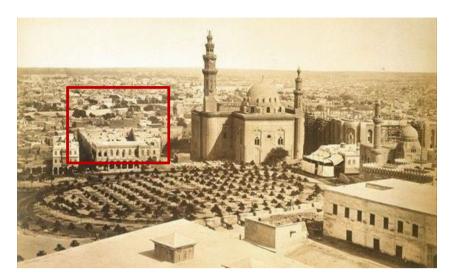


Fig. 7. Administrative building designed by the Khedivial style. (source: https://lens.google.com/, accessed on February 4, 2023).

2.5.2. The economic housing blocks next to Sultan Hassan Mausoleum at Salah al-Din square

As shown in Fig. 7 the existing building on the same site of the housing blocks that exist today, the building was an administrative building designed on the Khedivial style, Fig. 8 shows the current existing buildings that do not overview the surrounding ancient monuments in location and their design do not match with the design of the other buildings in the urban environment.

2.5.3. Prince Mangak Al-Yusufi Mausoleum

The mosque mausoleum of Amir Mangak Al-Yusufi is one of Al-Nasir Mohamed Ibn Qalawun's ministers and commander in chief of armies (El-kadi and Bonnamy, 2007). The complex is dated to the Mamluk era. It includes Sahrij (reservoirs) beneath the complex where drinking water supplies for pilgrims and the district were kept safe and clean (Noshokaty).



Fig. 8. The current situation of housing blocks that do not overview the surrounding ancient monuments in location (source: the authors).

(The Mausoleum is shown in Fig. 9, Fig. 10 shows Urban surroundings of the Mausoleum, and Fig. 11 shows the encroachments on the building's piece of land).

2.6. Case study upgrading strategy

According to the UNESCO studies and surveys in the field of the Urban Regeneration for Historic Cairo, the authors selected the points that can be applied on the selected cases (UNESCO, 2018) (Table 1).

3. Results and recommendations

The results could be summarized in Table 2 that shows recommendations of the critical review for the case study selected buildings representing tangible heritage, by the revival of the intangible



Fig. 9. Prince Mangak Al-Yusufi Mausoleum (source: the authors).



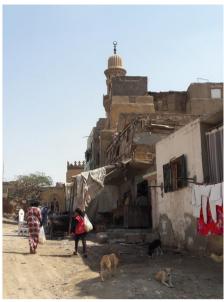


Fig. 10. The Urban surroundings of the Mausoleum of Price Mangak Al- Yusufi. (source: the authors).



Fig. 11. Encroachments on the building's piece of land (source: the authors).

cultural activities, Based on the UNESCO studies and surveys in the field of the Urban Regeneration for Historic Cairo (El-kadi and Bonnamy, 2007), also the authors recommend that the universities should include this important region on Historic Cairo in the list of the historic zones that need different planning and urban studies on the under-graduate and postgraduate levels, as the region has a unique urban character (Figs. 12—15).

4. Conclusion

Through the several moves of the seat of government in Cairo city the value of heritage buildings and their surroundings that had functions related to the presence of seat of government were developed due to the change of the first functional purpose for which they were built. Many old heritage areas as well as the urban surroundings of the old seat of

Table 1. Case study upgrading strategy, (source: the authors).

Field	Upgrading scope	Governmental Sector	NonGovernmental Sector	Public Sector
Historic Buildings	Conservation for deteriorated buildings	/		
	Reusing of buildings that lost its original function with appropriate uses	✓		
	Increasing the awareness of the historic value of these building	✓	✓	
	Using the buildings as points of attraction for Tourists	/	✓	
	Stopping the misuse of buildings as stores or garages Keeping the buildings clean			√ √
	Being aware of the buildings architectural and Historic values			✓
Surrounding Buildings	Developing the Facades of Housing Blocks	✓		
	Conservation of all Buildings in historic sites	✓	✓	
	Keeping the main function of Buildings (Residential to Commercial)			✓
	Adapting codes for new buildings with historic area identity	✓		✓
	Increasing the awareness of designers in the orientation of any new building to use the historic buildings as a point of view	✓	✓	
Urban Area Needs	Developing the economical sides based on tourism	✓		
	Providing Hotels for Visitors	✓		
	Developing the infrastructure (Public Transportation- Public Toilets- Visitors Help Centers)	✓		
	Setting a plan for other roads for mechanical movement during festivals	✓		✓
	Providing bazars and exhibition areas for hand crafts			/
	Hosting visitors by renting units as rooms or apartments like hotels during festivals			✓
	Presenting facilities for Visitors		/	/
	Working as part-time touristic guides			
Intangible Activities	Setting a calendar for the festivals that can be held in site	✓		
	Setting training classes for crafters	✓		
	Training of historic area residents for tourism-related jobs		✓	
	Participating in festivals			✓
	Designing souvenirs related to the site identity		✓	✓

Table 2. Recommendations of the critical review for the case study selected buildings, (source: the authors).

Selected Cases	Recommendations	
(1) Housing Blocks	1	Conservation for buildings' facades using elements of the heritage buildings, see Figs. 12 and 13
	2	Using the spaces between buildings as points of attraction for visitors like open air galleries or markets for traditional crafts, see Figs. 14 and 15
	3	Reuse of buildings with appropriate function such as Hotels
(2) Mausoleum of Prince Mangak Al-Yusufi	1	The current function is only for pray not a point of attraction for visitors
	2	Upgrading the urban environment for residents and visitors with organizing events related to Hajj procession date
	3	Conservation for the other parts of the Mausoleum like Kuttab and Sahrij related to Hajj procession
(3) Al-Mahmal Kiosk	1	Conservation for the building to its original condition
.,	2	Reuse of Building as a museum related to Hajj event showing the old Kaaba covering parts and the crafts tools used in sewing the Kaaba covering
	3	Reuse of Building as a governmental building for pilgrimage affairs
	4	Reused as the main starting point for the memorial event of Hajj procession on a certain date every year





Fig. 12. Before and after the re-design of building's façade in historic Cairo, (source: https://www.diwanarch.com/, accessed on March 3, 2023).



Fig. 13. Using elements of the heritage buildings in design, (source: https://www.elwatannews.com/, accessed on March 3, 2023).



Fig. 14. Bazar in Khan el-Khalili, Cairo (source: https://www.urtrips.com/, accessed on September 14, 2023).

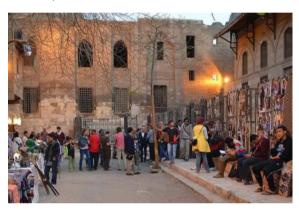


Fig. 15. Gallery at MASQ (Maqad of Sultan Qaitbai), Cairo (source: https://www.hellotickets.co.uk/, accessed on September 14, 2023).

government such as the buildings at Salah El-Din square. The study focused on the deteriorated buildings that lost their original functions and the buildings that do not match with the urban value of the case study location and trying to upgrade the condition of the whole site by the revival of the intangible events that took place in the location before by setting the study strategy that shows the rules of different sectors in the process of conservation of the buildings related to these events, in order to raise the historic and touristic importance, and the region can be included in the touristic map of Cairo, through the reuse and renovation of historic areas and the urban plans for the site, demonstrating the prospected contested socio-economic role of these area, especially their urban interaction to future global city functions.

Author credit statement

Conceptualization: ASEH, MF, SS, LA. Methodology/Study design: ASEH, MF, SS, LA. Resources:

ASEH, MF, SS, LA. Writing — review and editing: ASEH, MF, SS, LA. Supervision: ASEH, MF, SS, LA. Project administration: ASEH, MF, SS, LA.

Conflicts of interest

None declared.

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