

# Bringing to Life the Khedive Architecture: Al- Tahrir Complex Retrofitting

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*Abstract– Preserving heritage architecture sites and buildings has recently become one of the principle priorities of governments around the world especially the Egyptian government. There are direct efforts from the Egyptian government to bring to life the glory of the khedive Era through the restoration and retrofitting of the khedive heritage buildings. In this context this research will cover the efforts to retrofitting and reallocate the spatial activities of the Al-Tahrir complex. The study will spot light on one of the attempts to reuse the Al-Tahrir complex as a recreational complex building that includes hotels, conference halls and a mall. A preliminary architectural design plans, and 3d model will be demonstrated in the study to show the efforts done to enliven this complex building, which is one of the famous buildings of the khedive architecture. Adding a mass to a heritage building must be done wisely without hiding the main original building. And it can be done through the double skin façade way using the glass material.*

## I. INTRODUCTION

It is perhaps even harder to imagine that many early buildings of the ‘new quarters’ developed from 1868 onwards were already gone a couple of decades later, and that by the 1930s, a completely new landscape with opulent apartment buildings, movie theaters, and grand department stores, had replaced the early suburban houses of ‘Ismaïlia’, as the area was named upon its creation in reference to its founder, Khedive Ismail. On stepping out from one of the buildings in the newly renovated Shereifein Street situated in Al Borsa district, one finds themselves before a nineteenth century style street, together with an array of talented artists with their sketches, inspired by the quality of creation and the enthusiasm of a Parisian artistic scene.

Influenced by French architecture, Downtown Cairo was first built by Khedive Ismail in 1863, who was determined to turn Cairo, a largely medieval city, into the “Paris of the East”. Early Khedivial Cairo was essentially a suburban development, where land was given for free to anyone committing to build a house surrounded by a garden for a substantial amount of money in a maximum of two years.

Cairo and Paris, two cities that had a strong exchange of cultures following the French expedition in Egypt which affected their urban environment. By looking at Cairo’s urban development and Paris’s use of ancientness this essay will draw on the work of historians such as Trevor Mostyn, Richard G. Carrott, Stanley LanePoole, Desmond Stewart and

more to tell the story of how Cairo developed from medieval to Parisian belle époque, and how Paris found her new identity in the antiquity of ancient Egypt. In order to understand the whole picture, one has to go back in history where it all started.

Ismail Pasha, who ruled in 1863. Ismail, the man that Trevor Mostyn described as “the Medi-ci and founder of modern Egypt”, was born in Cairo then sent to Austria to live there for a medical condition and then moved to Paris for education. After that he came back to Egypt and upon his uncle’s death he was the heir to the throne. Having lived all his life in Europe, Ismail was more European than Egyptian, but he loved Egypt and he dreamed of making her a better country. In 1867 Ismail was invited by Napoleon III to attend the Exposition Universelle which was held by Baron Haussmann. The Egyptian pavilion at the Paris fair drew the attention of its visitors who were later on disappointed by the Khedive’s perfect French accent as they expected to see someone more eastern in his appearance. Ismail during his trip met Jean Pierre Barillet De-schamps, the landscape architect who designed Champs de Mars and Bois de Boulgne and who Ismail will later hire. Ismail wanted for Cairo what Haussmann was doing for Paris, he wanted a more modern and civilised Cairo. At that time he had two years left until the opening of the Suez Canal when he will be inviting all the leaders and royalties of the world to see the new Egypt. Ismail wanted to prove that Cairo is more European than African, so he assigned his former col-league in Paris Ali Mubarak Pasha the head of the “Public Works Ministry” to modernize Cairo in a European style [1].

The late Abdel Majeed Pasha Saleh, Minister of Public Works, received orders from the government to build the new administrative building for the Cairo Government and the incorporated style to be followed shall be Ancient Egyptian. Over the years, the functionality of the building was then transformed to what is known as the Administrative Complex (Mogamma'a AlTahrir). When mace started the works in 1948, however, Dr. M. Momen, who was a young recent graduate of the year 1945 batch, envisioned the building infused with Islamic styles and was able to convince both his elderly brother and senior architect Dr. Fahmy Momen and Abdel Majeed Pasha of his vision. The Tahrir Administrative Complex is a 12 storey building at a 55m height consisting of around a 100 rooms in each floor solely with its services, elevators and infrastructure. Elevators and other facilities of

course are as well included. The facade is entirely clad with artificial stone and carrara marble. The staircase tiles are of Egyptian granite (i.e. Aswan granites, well known for its durability). The structure strategic location overlooking Tahrir Square - at the center of Cairo's business district - is another reason why this building is considered a landmark. Probably millions of visitors seek their administrative errands today at this complex and hundreds of thousands of photographs are distributed as part of Cairo's iconic landmarks throughout its modern era [2].

Recently, the Egyptian government began its plan to evacuate the Tahrir Complex building, in coordination with the Cairo governorate and all ministries and agencies that worked in the complex, and prepared it to receive the investors and developers that will participate in the implementation of the development plans. Minister of Planning and Economic Development of Egypt in January 2021 announced that Egypt's (The Sovereign Fund of Egypt) TSFE plans to transform the Tahrir complex into a model to be emulated regarding the re-exploitation of assets, maximizing their returns and ensuring the rights of future generations. The Egyptian government opted to transfer ownership of the Tahrir complex to TSFE back in August 2020. Later in October several Egyptian and foreign investors were invited to review ideas put forward to develop the complex. The fund was established in 2018 with the aim of bringing in more private investments to Egypt and manage state-owned assets via partnerships with the local and international private sectors in a way that will benefit future generations and the state [3].

## II. AL TAHRIR BUILDING COMPLEX DEVELOPMENT

### A. Zoning of Functions

The plan of development of the Tahrir complex is going according to the government's Plan to benefit from governmental buildings and the areas that can be invested in the country to widen the base of the available investing opportunities and greatening the benefit from the exploited and unexploited assets for the country and varying the sources of finance to increase the compatibility and the productivity of the economy and identify the general, sustainable aims of economic developments.

The main purpose of the development of that complex is to benefit the country and give an additional value to Tahrir square itself In addition making the building more attractive for both tourism and investment. It's important to have a variety in the functions in the building in the way that guarantees a continuous income whether from the hotelier or commercial part of the building especially that Tahrir area is a strong attraction area for the offices and companies in addition to tourism because of special intermediate site between the west and east of Cairo

The complex it to be multi-functional and purposes building including different hotelier, cultural, commercial activities making a mall with restaurants in the first floors specially that there are already to big garage in the area; Tahrir garage and Omar Makram garage. With a variety of functions

in the middle floors. Taking in consideration that the last floors are hotelier zone.

Making the building contain the many functions without problems in the circulation is the real challenge. The zoning of the building was put in the way that organize the circulation of each function so that no one can disturb the other. The zoning was primarily done without additions to building as shown in Fig.1.

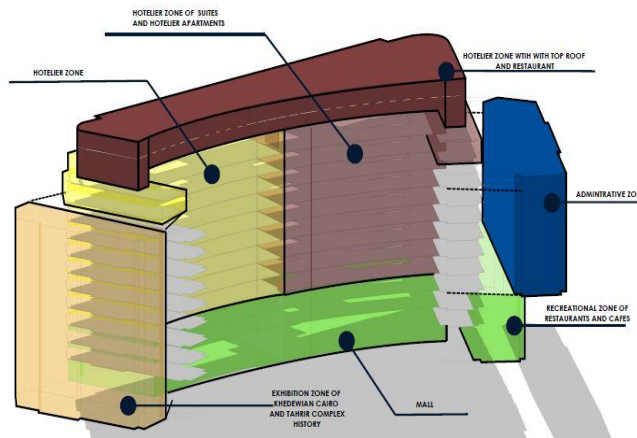


Fig.1 Zoning 3D View

### B. Plans and Layout

The layout of the building is to contain recreational place that fit with the greatness of the downtown including Romanian stages, green areas, fountains, inclined waterfalls with different level recreational places as shown in Fig.2.

The functions was zoned in build in the way that the mall including the food courts in the ground floor. In addition to the reception of the hotel, exhibition and administration zones as shown in Fig. 2.

The typical floor from the second to the sixth floor is occupied by the mall, the exhibition part and the administrative zone as shown in Fig. 3. The 7<sup>th</sup> floor to the last floor is zoned for the different types of hotel spaces like the rooms, suites.



Fig.2 Layout and Ground floor

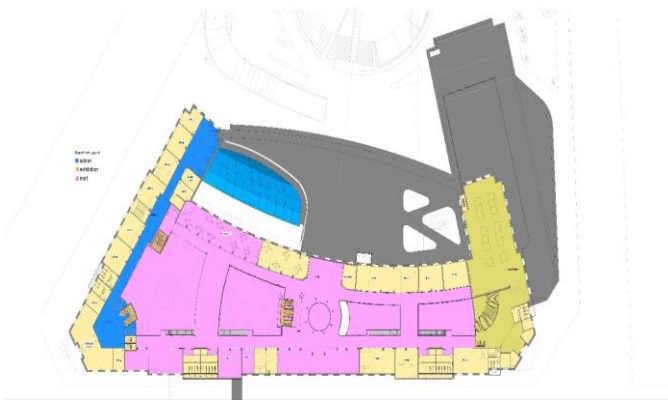


Fig.3 Administrative zones

C. Building Additions

It has to mentioned that there is a building is to be designed behind Tahrir complex which is connected to the building with 2 flying links which contain the services and storage of the kitchens that serve the restaurant as shown in Fig.4 and Fig.5.

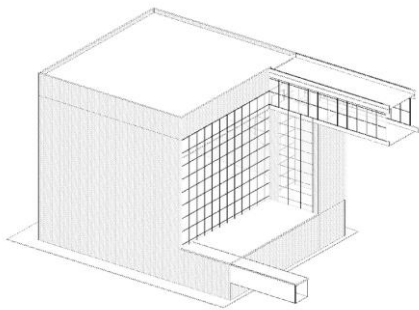


Fig.4 Added backyard Building

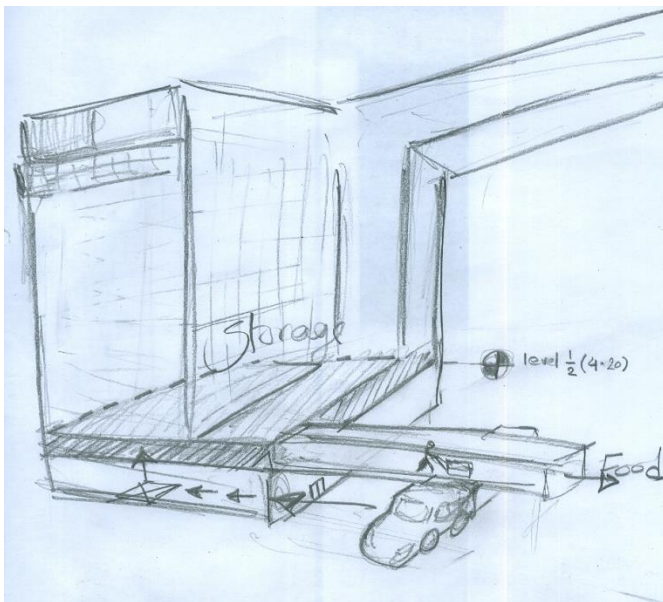


Fig.5 Sketch of the back-yard added building

D. Facade Design

The façade of the building was criticized because of its monotony with huge amount of solid windows so a double skin façade is used in the façade so that monotony can be broken and some zones of the building can be specialized from the others as shown in Fig.6.



Fig.6. 3D Perspective

Glass is used as a main material in the double skin façade to have a little effect on the original façade. The entrance to each zone has its own special approach as shown in Fig.7. The different approaches and areas requirement of each zone has led to adding some addition to the building mass like the hotel reception and the panorama elevator placed on the façade. To satisfy the Hotel rooms with balconies without affecting the façade through cancelling the windows a transforming window to balcony is used as shown in Fig.8.

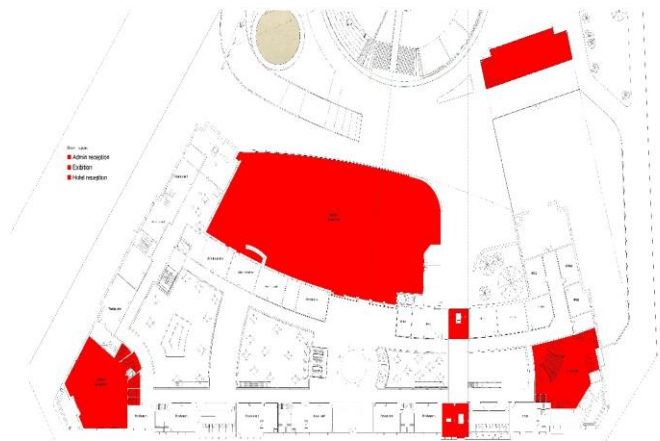


Fig.7 Entrances' locations



Fig.8. Innovative Fenestration and Balconi

#### IV. CONCLUSION

Each building or area has to be taken advantage of even if it's a heritage building. And when it comes to heritage it must be preserved for protecting the country's culture and history. Using the building and editing it must done in the right way so the heritage is not affected.

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