

STUDY ON THE APPLICATION OF ECOLOGICAL THOUGHT TO TRANSFORM ARCHAEOLOGICAL PALACES INTO BOUTIQUE HOTELS "Development and Rehabilitation of Qaitbay Agency in Cairo into a Hotel"

(Individual Exhibition applied research view)

دراسة حول تطبيق الفكر الإيكولوجي لتحويل القصور الأثرية إلى "بوتيك أوتيل"
" تطوير وإعادة توظيف وكالة قايتباي بالقاهرة إلى فندق "

(معرض بحث تطبيقي فردي منظر)

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ABSTRACT

Heritage structures are with unique historical, religious, architectural, aesthetic, and/or scientific importance. Rehabilitating the historic building is equivalent to maintaining it or giving it a new role. Also, using it in a way that matches its character and urban surroundings is equivalent to revitalizing it or giving it a new life. The challenge comes from using the building in a new way that it was not accustomed to, adapted to, or prepared for. Remodeling the space to suit the requirements of the new status may be a part of recruitment. The cost of rehabilitation and restoration is often more than demolition and new construction. So why even think about adaptive reuse. The research discusses the idea of re-use as one of the strategies for preserving the urban heritage. The country is going through economic and cultural problems among the different segments of society, so it must take advantage of this heritage and preserve it and keep pace with the architectural development with an environmental thought that works to increase the rate of development and cultural awareness of the society.

KEYWORDS

Rehabilitation; Renovation; Adaptive Reuse; Re-employment.

المخلص

الهياكل التراثية هي هياكل ذات أهمية تاريخية أو دينية أو معمارية أو جمالية أو علمية فريدة من نوعها. إن إعادة تأهيل الهيكل التاريخي يمكن أن نطلق عليها أنها منحة حياة جديدة، فتوظيفه أو إعطائه وظيفة، واستخدامه بطريقة تتناسب مع طابعه ومحيطه الحضري يعادل منحه حياة جديدة أو إعطاء جسده الثابت روحه وحيويته. يأتي التحدي في هذا البحث من خلال استخدام المبنى بطريقة جديدة لم يعتاد عليها أو يتكيف معها أو يستعد لها. قد تكون إعادة تصميم المساحة لتلائم متطلبات الوظيفة الجديدة جزءاً من عملية التوظيف. غالباً ما تكون تكلفة إعادة التأهيل والترميم أكثر من مجرد هدم وبناء جديد. فلماذا حتى التفكير في إعادة الاستخدام التكيفي لوكاله قايتباي بالقاهرة. يناقش البحث فكرة إعادة التوظيف كأحدى استراتيجيات الحفاظ على التراث العمراني، حيث تمر البلاد بمشاكل اقتصادية وثقافية بين فئات المجتمع المختلفة فيجب عليها الاستفادة من هذا التراث والحفاظ عليه ومواكبة التطور المعماري بفكر بيئي يعمل على زيادة معدل التنمية والوعي الثقافي للمجتمع.

الكلمات المفتاحية

إعادة التأهيل؛ التجديد؛ إعادة الاستخدام التكيفي؛ إعادة التوظيف

1. INTRODUCTION

Rehabilitation acknowledges the need to alter or add-to a historical property to meet continuing or changing uses while retaining the property's historic character. Also, restoration depicts a property at a particular period in its history, while removing evidence of other periods. In addition, reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes. Moreover, Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time. "Adaptive reuse is a process that changes an unused or ineffective item to a new item that can be used for a different purpose." (Australian Department of Environment and Heritage Adaptive reuse, also known as adaptive reuse engineering, is the practice of repurposing structures that have served more than one purpose while preserving their original architectural details. Any structure that has gone through the designation process as "historic" is often protected from demolition by law. Four therapeutic categories—conservation, rehabilitation, restoration, and reconstruction—have guiding Standards for the protection of these historic structures. "Rehabilitation is defined as an act or process to allow compatible use of property through repairs, modifications and additions while preserving those parts or features that convey their historical, cultural or architectural values." More than just a save-oriented trend, adaptive reuse has evolved. It has evolved into a means of preserving memories and preserving the environment.

1.1 Materials and Methods

-The research adopts the descriptive and analytical approach for the development of heritage places in Egypt and the extent to which they are related to technological and technical development, as well as the extent to which successful design and the design idea have an impact on raising the level of visitors' culture.

-It also depends on the case study approach and conclusion by studying the current situation of Qaitbay Agency and deducing different and innovative ways in designing to preserve heritage and integrating technology to create an ecological space without compromising the history of the place.

1.2 Statement of the problem

- The country is going through economic and cultural problems among the various groups of society, and since Egypt has many landmarks and attractions for foreigners, it must take advantage of this heritage, preserve it and keep pace with the architectural development keeping in mind the environment so as to increase the rate of development and cultural awareness of the community.
- The need to clarify the extent to which society's culture is influenced by modern technology and show the way it is presented in an easy and innovative way to improve the economic and intellectual level of society.
- The necessity to study how to preserve this heritage and its history and find ecological solutions throughout the process.

1.3 Research Delimitations

- Clarifying the positive impact of technology on the interior design and the development and re-use of the Qaitbay Agency into a heritage hotel by studying and analyzing the current situation and reaching the means to develop it.

- Identifying the types of modern technologies in terms of their compatibility with the design standards of heritage places and studying the extent to which visitors interact with modern technologies in this era and merging them with everything that is old.

1.4 Meaning of Arcology

Arcology, is made up of the two words "architecture" and "ecology", is the field of creating architectural design principles for densely populated, low-impact housing. Environmental architecture is concerned with how environmental characteristics affect a building, its occupants and the surrounding environment.

Ecological elements are selected from the earth's natural resources or processed as minimally as possible from biodegradable, renewable, clean, low-energy elements. Sim Van der Ryn and Stuart Cowan define ecological design as "Any form of design that minimizes environmentally destructive impacts by integrating itself with living processes."

In this regard, Egypt is currently studying several proposals to re-exploit the ancient palaces scattered in various governorates, that include converting them into "Boutique Hotels" or Cultural Centers and Tourist Attractions, with the aim of increasing the state's economic resources, within the framework of the plan to develop the Historic Cairo area, and transfer government bodies to the new administrative capital. (Grierson, 2003)

According to the statements of Mohamed Abdel Aziz, director of the Historic Cairo Project at the Egyptian Ministry of Antiquities, to Asharq Al-Awsat newspaper, "there are 58 archaeological palaces in Egypt, several proposals for their reuse are currently being studied by a ministerial committee formed for this purpose."

2. REHABILITATION PALACES

Rehabilitation palaces into hotels is not new in Egypt or the world, as the ancient El Salamlek Palace in the Montazah Park in Alexandria was previously used as a hotel for five decades. About a year ago, a project was announced for its restoration and development. The palace dates to 1892, when it was established by Khedive Abbas Helmy as a resting place for him and his wife. It was the royal summer residence before the establishment of "Al Haramlek" in 1928. The "Marriott" and "Mena House" hotels were built in ancient palaces, and a proposal to convert is renewed every period to convert mansions into hotels, but no actual measures are taken to implement them.

Internationally, there are many palaces that are used as hotels, such as the Palace of Versailles, which France recently announced to convert part of it into a huge tourist hotel, to increase the country's resources. In Italy, the Palace of "Villa d'Este" was turned into a hotel in 1873, which is one of the most important Italian hotels, and it was previously the seat of the royal family, and there is also the Palace of "Gritti" in Venice, and India turned the palaces of "Udai Bilas" and "Falaknuma" into tourist hotels, while Portugal turned The Olissippo Lapa Palace, which dates back to the nineteenth century, is a hotel overlooking the finest neighborhoods in Portugal. The Xara is one of the most important hotels in Malta, it is in an ancient palace dating back to the seventh century. Spain owns the Palace de Villapanes, which is of the eighteenth-century architecture and has been converted into a 5-star hotel, as well as Britain with the Hampton Court

Palace, Austria with the Schonbrunn Palace, and Turkey with the Ottoman Palace Kempinski in Istanbul.

Egypt also has a large group of palaces distributed in different governorates, some of each need restoration and maintenance, and the number is approximately 10, and others are exploited by tourist attractions, or government agencies, occupied by ministries such as the Ministries of Education and Culture, and some of them are still private property.

There are also other proposals to re-use these palaces as museums or cultural centers, as is the case in various countries of the world, but the final decision will be made based on the nature and conditions of each palace, and the spaces that can be added to it such as gardens or others.

A team of 30 specialists continues to work on restoring the “Alexan” Palace in Assiut, and protecting the palace, parts of which collapsed due to time, including the stairs and the eastern entrance, in addition to restoring the four facades of the palace. Abskhiron, in the European style, is in the center of the city of Assiut on the banks of the Nile and includes “rococo” and “baroque” decorations on its facades. At the same time, the El-Shennawy Palace is being restored in Mansoura, Dakahlia Governorate, which was built by Mohamed Bey El-Shenawy, one of the most prominent members of Parliament and a member of the Wafd Party, who was a friend of the late Egyptian politician Saad Pasha Zaghloul, and the palace was built in 1928 in the Italian style. Restoration work on the Baron Palace, which was built by the Belgian Baron Empain, founder of Heliopolis, in the Indian style.

In conjunction with the restoration operations, the Ministry of Planning is working on a plan to transfer ministries and government agencies to the new administrative capital, which will result in the evacuation of some ancient palaces, so there must be a plan for how to exploit them.

Therefore, the research came in the process of Egypt's efforts to transform ancient palaces into tourist hotels by studying the transformation of the Qaitbay Archaeological Agency into a hotel, which was built by the Ashraf King Abu al-Nasr Qaytbay in the year 885 AH / 1481 AD

2.1 The Transformation of the Qaitbay Archaeological Agency into a Hotel

Qaitbay Agency in Al-Gamaliya District and Sultan Al-Ashraf Qaitbay This building is a model for wikalas in the Mamluk era, which included stores, shops selling goods and places for merchants to stay. It is located on Bab Al-Nasr Street, next to this door, to the right of the entrance to the city of Cairo through Bab Al-Nasr. It is a large and spacious agency, but unfortunately it is currently inhabited as a house for some people. Therefore, we find that large and important parts of its architectural elements have disappeared from it, which are the remains of an example of a commercial store that dates to the Circassian Mamluk era, and we find that the architectural plan of this agency did not change in the following eras.

Sultan Al-Ashraf Abu Al-Nasr Qaitbay was one of the sultans of the Circassian Mamluk state, and he was a lover of architecture and the arts. 901 AH / 1468 - 1496 AD), and he was called al-Ashraf and his reign was one of the best of the Circassian eras, because his rule lasted for a long time, as Qaitbay ruled Egypt for a period of twenty-nine years, and none of the Mamluk sultans ruled that period or more than that, except for al-Nasir Muhammad ibn Qalawun who ruled Egypt for nearly forty-two years. The agencies or khans of Sultan Qaitbay are considered among the most beautiful examples of the art of Islamic decoration that accompanies Islamic architecture. The agency of

Sultan Qaitbay in Bab al-Nasr dates to the year (885 AH / 1481 AD), and it is likely that in its planning as well as in its architectural contents, it follows the system of wikalas that were built in the Mamluk era with both parts: Bahari and Circassian; but of course they are closer to the agencies of the Circassian Mamluk era. (“The Qaitbay Archeological Area Will Be After Transformed Into A Heritage Hotel,” 2020)

2.2 Building History:

This agency was established by Sultan Al-Ashraf Abu Al-Nasr Qaitbay the Circassian - ten years after he took over the rule of Egypt in 882 AH-1477 AD. The original building consisted of three floors arranged around a spacious inner courtyard, and the ground floor included a well and toilets to serve the warehouse workers. Various shops were organized on the outer street, while the two upper floors contained residential units. The ground floor consisted of iwan and the role of a hall, a house, a toilet, a staircase that leads to the second floor, which includes the bedrooms.

The features of this agency (wikala) have now disappeared, and nothing remains of it except its exterior (northeast) façade in which the entrance is located. Including a wide income contracted with a pointed contract that leads to the inside of the agency. Annex to the agency and its path, there is a kuttab for teaching orphans, and the design adhered to the function as it considered the complete separation between commercial activities and services on the ground floor and the housing units on the upper floors. In the axis of the northeastern façade overlooking the street, while three separate entrances to the upper quarter were organized at the far ends of the façade.

The external formation of the building, in general, relied on the surface formation, using intertwined plant and geometric motifs in the arches. It is noted that the façade has been designed to express the contrast of the function of the spaces behind it, so we find the façade of shops in the form of interiors topped by straight lintels filled with intertwined plant motifs, while the façade of the residential part is designed in the form of three rectangular windows on two levels on each floor. The building block of the path and the kuttab was confirmed by its deflection from the rest of the wikala's block. The façade of the sabil has been treated differently from the rest of the façade, but in a similar way to the previous methods, in terms of the presence of sabil windows above the book façade with balustrades based on a middle column bearing horseshoe knots.

Limestone was used in the construction of the external and internal walls overlooking the courtyard, while the bricks were used in the construction of internal partitions, especially in the service area. Wood was used for ceilings in residential units, while stone vaults were used in harvests. Natural, its use spread during this period, and it bears climatic and environmental factors, as well as provides the required thermal insulation.

The agency (wikala) includes 24 housing units “Hasel”, all of which will turn into “duplex” suites, which will not be restricted to foreigners only, but will be open to Egyptians wishing to reside there, looking for the fragrance of Mamluk Egypt’s heritage and the charm of its merchants’ time and way of life.(Munira Abdul Malik bin Duheish, 2020)

2.3 Working style:

1. The choice fell on the Qaitbay Agency to study the possibility of reinvesting it as a hostel (hotel) after restoring it and rebuilding the collapsed parts of it and returning it to its first form, as decided by the archaeological restoration experts, and thus the first function of the building can be revived.

In this case, the appropriate building materials must be used, which are integrated architecturally and archaeologically with the original building, bearing in mind that any additions or equipment added to its various elements are made so that the original structure is not affected by it, whether it is by making water, sewage or electricity extensions, so they can be installed in pipes installed on walls or ceilings and in appropriate places in the corners of rooms. If the upper floors are used as rooms for residence, or the ground floor is used as sitting and waiting rooms, and in all cases, the old windows and doors are restored to return them to their original condition, and the windows are taken the new doors have not to be the same as the old ones.

2. In all cases, the new furniture is designed from wood in its natural color but in a contemporary way, with the development of modern equipment so as not to affect the ceilings or walls. In this case, the new floors can be used as a place for various extensions after being completely isolated to ensure the complete safety of the building.

3. If the agency building does not meet the requirements of modern hotels, it is necessary to add some accessories to the hostel (the agency) that include the equipment and accessories required to operate the hotel. This is done either by acquiring the adjacent building, which is owned by the Ministry of Awqaf and is not considered an antique building so that it can be used to include kitchens and boilers from hotel equipment, provided that the agency's ground floor includes the necessary restaurants. And if this proposal is considered the best from an operational point of view, it is not the best from an investment point of view to operate the inn as a hotel. The addition of 215 rooms, 28 shops and 320 chairs in restaurants, and with that, it is possible to own the third leased land to increase the number of shops and handicrafts and add other modern elements such as Turkish bath or traditional coffee, which increases the investment return of the integrated project. On this basis, the architectural designs of the added parts can be developed so that they are in line and architecturally compatible with the archaeological building and preserve its distinguished architectural entity so that the new buildings do not rise to the level of the height of the archaeological building or exceed it, rather, it is treated architecturally, provided that its height does not exceed three floors.

3. CHARTERS OF MONUMENTS PROTECTION

International charters for the protection of antiquities, currently known as the international charters of Monuments Conservation. And the word covenant means in English to give right, so it is tantamount to a statement, i.e., the covenant defines what is permitted and authorized. As for the word covenant in the Arabic language, even if it is derived from the verb trust in the meaning of strong, proven and firm, then when he writes what has been achieved, then that writing is the subject of trust and stability, and it becomes a covenant and a covenant. The linguistic connotation of the word in foreign languages indicates that the origin of the matter is to prevent dealing with antiquities except within the limits permitted by these charters, while in the Arabic language it serves an ethical organizational concept more than prohibiting or obligating. International charters are close to laws, but they differ from them in that the obligation to implement the charter is a moral issue, i.e. it is an honorary obligation, while the law must be implemented is a compulsory issue in which there is no choice. (Technology) to ensure the compulsion of its effects. Since the issuance of the first charter in the decisions of the Sixth International Conference of Architects, which was held in Madrid in 1904, followed by many charters, amounting to more than ten

international charters, the main objective of all of them was protection. Accordingly, necessarily methods and techniques of preservation and restoration of antiquities. We recommend that it is necessary to review the full texts of the charters and the accompanying preparatory data to find out the details of the charter, since the drafting of these charters is usually highly focused and selective.

The following are some items that define the general principles and basic technical standards of the project in question:

3.1. The Athens Charter 1931 For the Restoration of Historic Monuments- 5th Article:

After studying and examining modern materials and technologies that can be used in the processes of preserving and strengthening old buildings, experts welcome the use of all materials created by modern technology, especially reinforced cement, provided that the necessary strengthening works for the building do not override the general appearance and special shape of the monument to be restored, and that the preservation work is as much as possible. Possible in the site of the impact itself so as not to be exposed to risks in cases of transportation or dismantling and installation.

3.2. The Venice Charter 1964, International Charter for the Conservation & Restoration of Monuments and Sites. 12th Article:

All works and additions that are placed in places that lost their original parts must be in harmony with the general form and can be observed and differentiated from the original works so that the restoration does not mix and distort the artistic or historical appearance of the work.

3.3. Lahore Charter 1980, on Conservation & Restoration of Islamic Architecture Heritage: 6th Article

The use of antiquities for a socially beneficial purpose is always easy to preserve, and it may therefore be desirable to change the functions of Islamic antiquities, but this should not cause a change in the design of the building or in its decoration, and it must consider Islamic morals and agree in the original function of the building. And those within the limits that should be adhered to when studying the modifications that require changing the function of the building and within the scope of which these modifications can be permitted.

3.4. Lahore Charter 1980, on Conservation & Restoration of Islamic Architecture Heritage: 14th Article

Because the need to find new functions for many Islamic monuments requires the introduction of some internal and external additions, it should not be allowed to establish these additions unless they do not detract from the importance of the important parts of the building or its traditional environment or balance its composition and its relations with what surrounds it. In all cases, the principles of the possibility of reversing what was done should be applied to the original state of the effect. (Y Michael Petzet, 2004)

4. FEW EXAMPLES OF REHABILITATION IN ARCHITECTURE

4.1 The Canadian Museum of Nature is Canada /2001:

The 3rd significant structure in Canada with a heritage designation is the Canadian Museum of Nature, the nation's first museum created specifically for that purpose. The original building, which

is in Ottawa, was created utilizing Beaux-Arts planning concepts in the Tudor-Gothic Revival style by David Ewart, the Chief Architect of Public Works. Figure (1) To fulfil its original role as a national service to teach and educate Canadians about important natural history and environmental issues, The Renewal Project was created in 2001. Its goal is to enhance the building's functional, architectural, and heritage performance. The emphasis of the design is on having a dual awareness of the past and present. By conserving the materials and craftsmanship of the Tudor-Gothic elements and restating the original Beaux Arts principles with a series of striking contemporary interventions, the heritage fabric is treated as an artefact.(Architizer Editors, 2010)

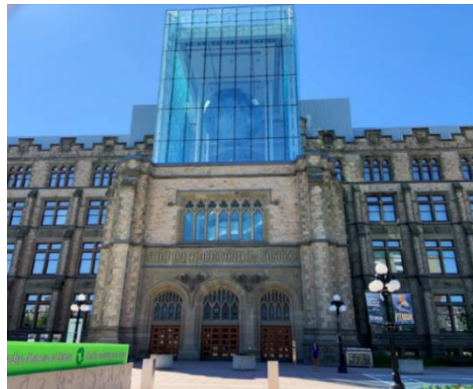


Figure (1) The Canadian Museum of Nature is Canada (Source: KPMB Architects, 2022)

4.2. Dresden Museum of Military History by Daniel Libeskind / 2011

The government made the decision to close the museum in 1989 because it was unsure of the museum's place in the newly united German state. By 2001, attitudes had changed, and an architectural competition was conducted to design an addition that would encourage us to reexamine how we view conflict. Figure (2). The winning design by Libeskind brazenly breaks up the symmetry of the original structure. The 135-year-old former arsenal's structural order is disrupted by the extension, a colossal five-story, 200-ton wedge of glass, concrete, and steel. A dramatic space for meditation is created by a 99-foot-high viewing platform that offers stunning views of contemporary Dresden while pointing in the other direction toward the origin of the fire-bombs.(Mara Corradi, 2012)



Figure (2) Dresden's Military History Museum / Studio Libeskind (Source: Archdaily, 2011)

4.3 The Church of Vilanova del la Barca / 2016

Due to bombs during the Spanish Civil War, the 13th-century Spanish Gothic church of Vilanova de la Barca was substantially destroyed in 1936. Since that time, the church has fallen into

disrepair, leaving only the apse, a few intact pieces of the naves, and the west façade. Aleaolea, a firm based in Barcelona, renovated this church with the intention of maintaining the structure's historic aspect while converting it into a modern multi-purpose hall. The project creates a dialogue between the previous and current, between the old and new components. Figure (3,4)(Af Elliott Webb, 2022)



Figure (3) The exterior of Spanish Gothic Church of Vilanova de la Barca (Source: kat barandy, 2018)



Figure (4) The interior of Spanish Gothic Church of Vilanova de la Barca (Source: kat barandy, 2018)

4.4. The Church of Saint Francis' Convent

A modern cultural complex featuring an auditorium, a multipurpose room, and, eventually, a historical archive was created from an 18th-century chapel and convent in Catalonia by architect David Closes. While reflecting the shapes of the historic complex, new components such as a glass-enclosed entrance and cubic volumes resting on enormous concrete beams give the building a vibrant contemporary identity. Figure (5,6) (Archi scene, 2014)



Figure (5) The exterior of the Church of the Convent de Sant Francesc, Santpedor, Spain (Source: Amy Frearson, 2012)



Figure (6) The exterior of the Church of the Convent de Sant Francesc, Santpedor, Spain (Source: Amy Frearson, 2012)

5. APPLIED STUDY ON THE APPLICATION OF ECOLOGICAL IDEA IN CONVERSION OF ARCHAEOLOGICAL PALACES INTO BOUTIQUE HOTELS.

Proposal Development and Rehabilitation of Qaitbay Agency:

Through the study of planes, the researcher tried to achieve the functions that make the hotel keep pace with the needs of the times. He also tried, through his treatment of the facade, to emphasize simplicity.

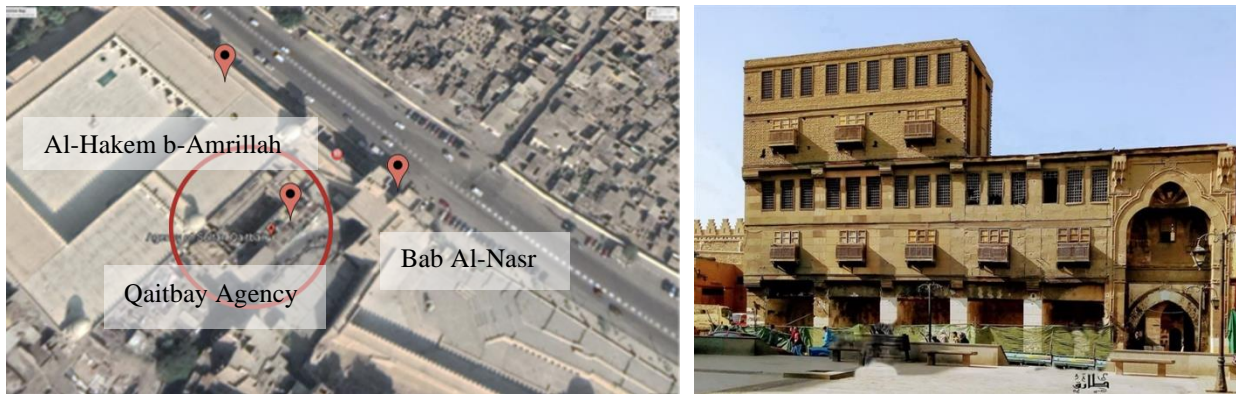


Figure (7) The Qaitbay Agency is in Al-Gamaleya area on Bab Al-Nasr Street and its spaciousness. It was a commercial storehouse dating back to the Circassian Mamluk era. It consisted of three floors, overlooking a spacious inner courtyard, and the ground floor included harvests for trade, and the two upper floors were used as housing and living quarters for merchants. (Source: The portal, 2017)

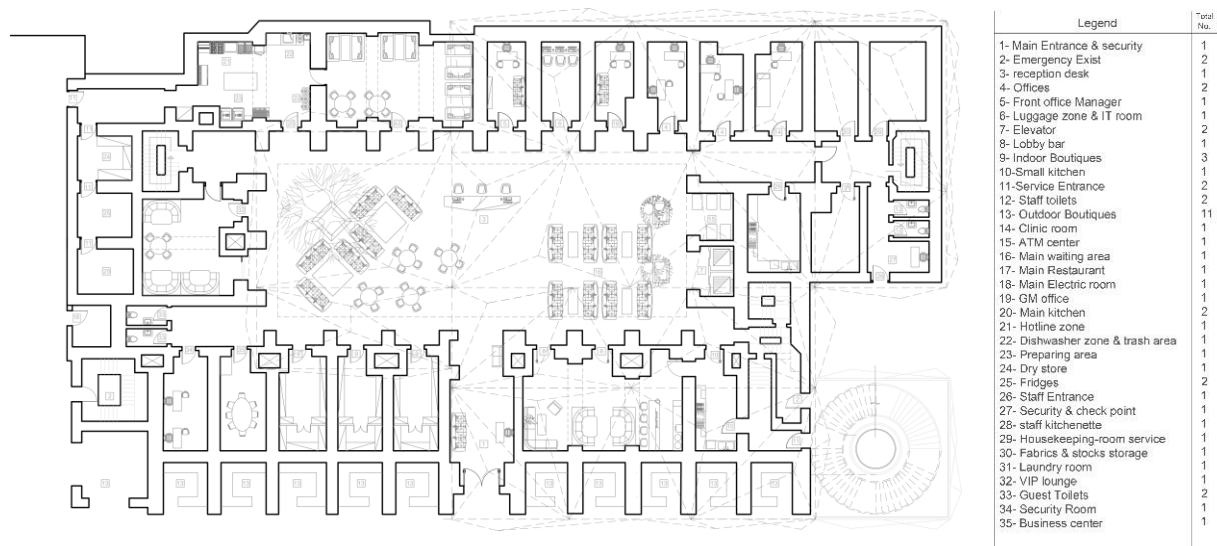


Figure (8) 1st floor plan showing the zones function (From the work of the researcher)

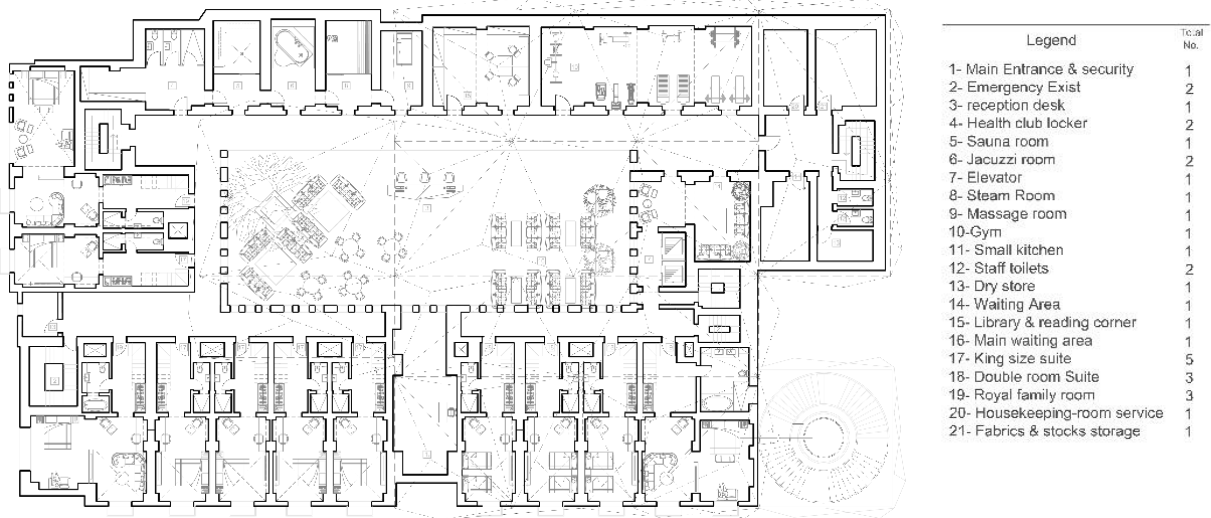


Figure (9) 2nd floor plan showing the zones function (From the work of the researcher)

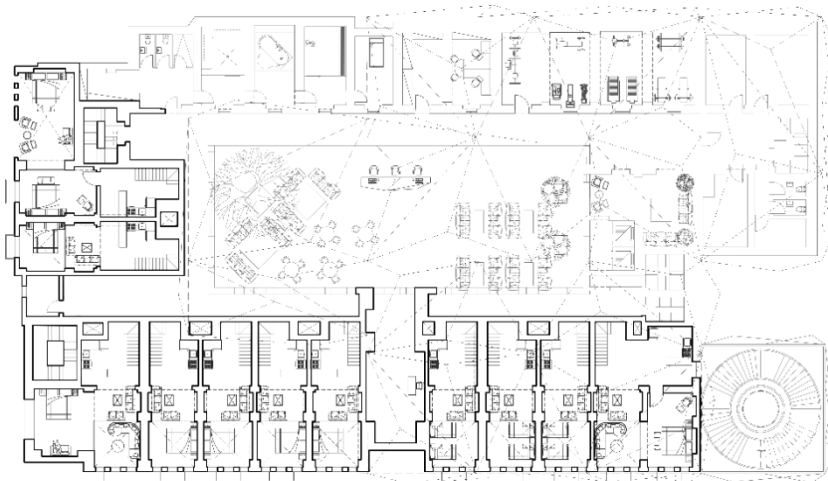


Figure (10) 2nd floor plan mezzanine (From the work of the researcher)

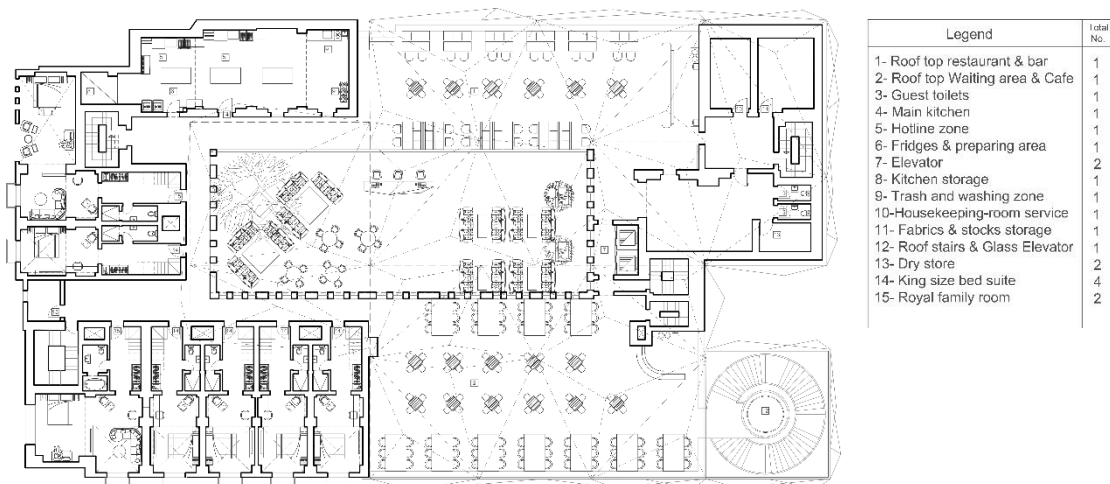


Figure (11) 3rd floor plan showing the zones function (From the work of the researcher)

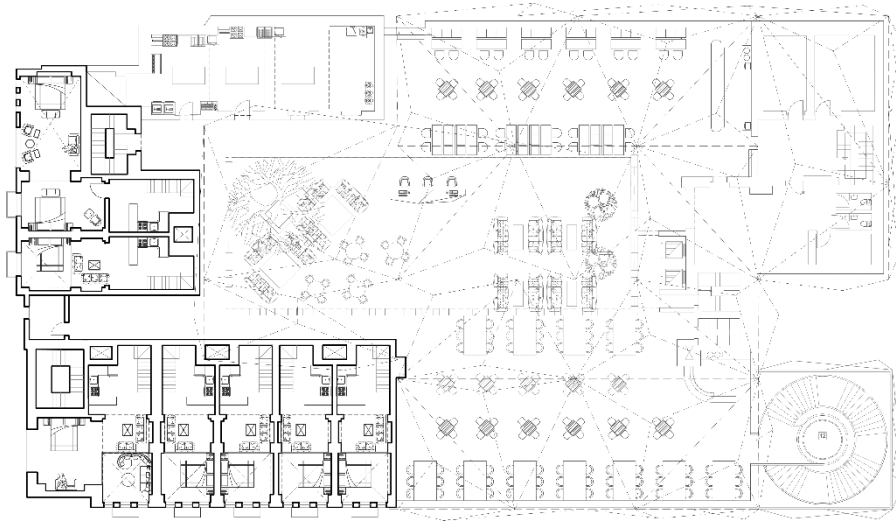


Figure (12) 3rd floor plan mezzanine (From the work of the researcher)

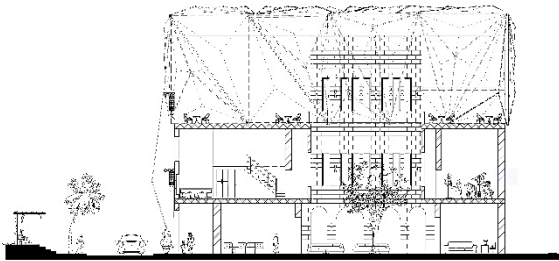


Figure (13) Section demonstrating the relation of the coverage with the facade (From the work of the researcher)

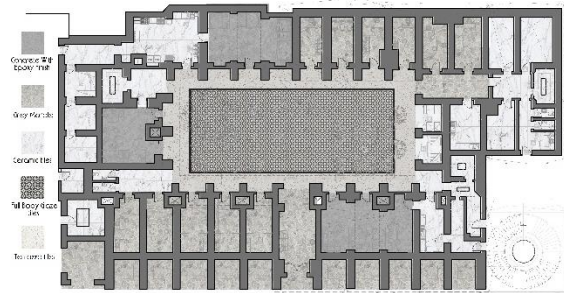


Figure (14) Plan of the 1st floor material (From the work of the researcher)

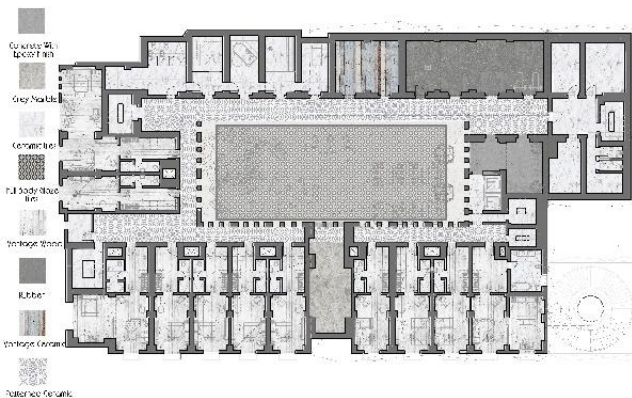


Figure (15) Plan of the 2nd floor material (From the work of the researcher)

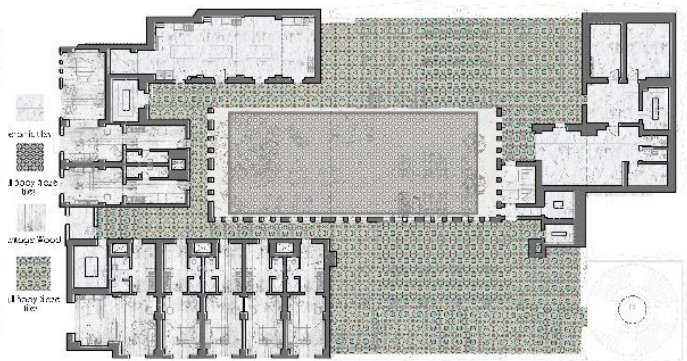


Figure (16) Plan of the 3rd floor material (From the work of the researcher)

New technologies that enable buildings by replacing and adapting to and with the environment thanks to a unique dynamic shading system to reduce buildings' solar gain by 50% completely to adapt to changing conditions. Also, the researcher added an exterior elevator and stairs to connect the outdoor with the roof.

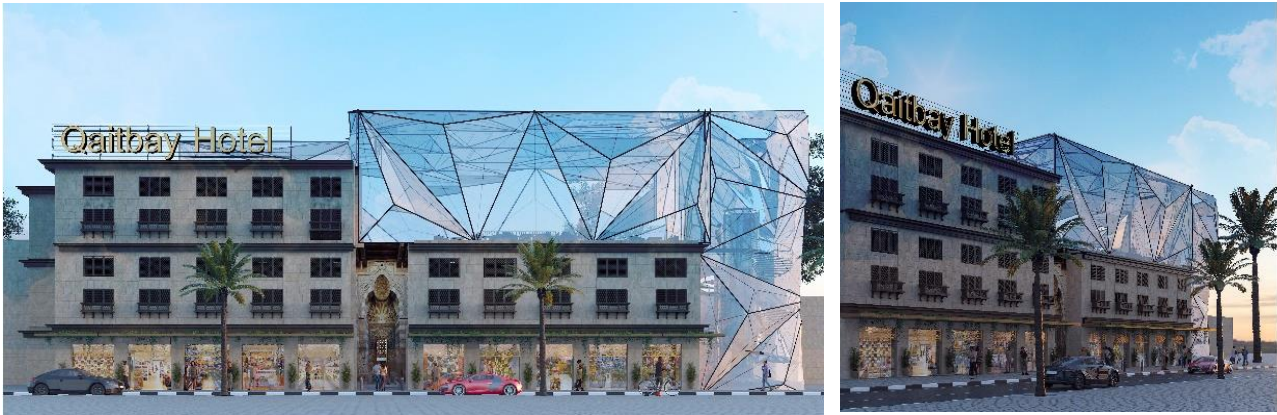


Figure (17) The 1st proposal to treat the facade of the Qaitbay Agency in Cairo using ecological architecture and adaptive reuse, characterized by simplicity of design. (From the work of the researcher)



Figure (18) The 2nd proposal to treat the facade of the Qaitbay Agency in Cairo, the staircase is exposed using ecological architecture and adaptive reuse, characterized by simplicity of design. (From the work of the researcher)



Figure (19) The 3rd proposal to treat the facade of the Qaitbay Agency in Cairo, using ecological architecture and adaptive reuse, characterized by simplicity of design. (From the work of the researcher)

As a contribution to Egypt's vision for sustainable development, and raising awareness of the surrounding community, the researcher used Solar Powered LED, as it relies entirely on clean energy, as the solar-powered lighting units work automatically as soon as the sun goes down. The solar garden lighting units do not contain any connections electrical or wired, ensuring a high level of safety and durability.



Figure (20) Perspective showing the importance of the sunlight and at the Solar Powered LED at night. (From the work of the researcher)



Figure (21) Perspective showing roof. (From the work of the researcher)



Figure (22) Perspective showing a king room example. (From the work of the researcher)

6. RESEARCH RESULTS

- Showing the architectural and archaeological elements of the re-employment program and not harming these elements and achieving the proposed job for an economic return that contributes to the continuity of maintenance.
- Confirming the re-employment program on the urban formation of the surrounding urban fabric and benefiting from it and creating a mutually beneficial relationship between the archaeological sites and the surrounding community.

7. RESEARCH RECOMMENDATIONS

- Egypt seeks to increase the state's resources through several projects to re-exploit state assets. It even established a sovereign fund for this purpose. Through the project to re-exploit archaeological palaces, Egypt aims to make them economic resources for the country, whether they are antique hotels at high prices, or museums, cultural centers, and tourist attractions, as it is well known that

accommodation prices in this type of hotel are higher than others due to its archaeological value, and the historical or political dimensions that some hold.

- The contribution of the re-employment program to the exclusion of activities that have a detrimental impact on the archaeological elements and society.
- Contribute to the revitalization of the tourist movement, and the absence of a negative impact on the environmental stability of the surrounding area.
- Contribute to environmental development and create direct and indirect work jobs for members of the surrounding community.
- Achieving a nucleus for sustainable development and raising the archaeological awareness of the surrounding community.

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