

## Employing Heritage Elements in Contemporary Architecture. 3-Mosque's Gates: Case Study in Amman City – Jordan

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### Abstract

This paper examines the entrances of buildings as an integral component of the building, which can be used and developed. Entrances, in general, have multiple functions, including entering and exiting the building, guiding the users, preserving the privacy, and reflecting the architectural character of the building. It also gives the first impression of the building and enhances its identity, as it also reflects the interior design of the building, decorations, and engravings.

The entrances to Islamic Mosques have a distinctive character and differ from the entrances to palaces and apartment buildings, with a clear openness and reflect the architectural thought in time and place that affected the architecture. Despite the geographical and temporal divergence, and the different civilizations, materials, and workmanship, they still had a common style and had special characteristics.

This study directs architects to examine the philosophy of Islamic architecture and to quote from it some elements that still retain the same function and have the same philosophy and its development so that they appear to be interrelated with the inherited Islamic architecture and do not deviate from it.

**Keywords:** entrances; mosque; architectural heritage; contemporary architecture.

### Introduction

The first part of the re-employment of some elements of heritage in buildings discussed water harvesting operations that were a major source in supplying private housing with water until the beginning of the seventies in Jordan (Al Nassar et al. 2020).

The second part discussed the re-use of openings and windows in traditional buildings in new buildings. And the fact that these heritage elements have evolved over a long period of time, and were the result of understanding, knowledge, and experience, they added to the buildings their own character and were of inherited engineering proportions. As the practical function of these openings has not changed, the re-employment of these proportions will result in adding beauty to these openings and will give buildings, in a geographical area that have the same climate and other requirements, their own distinct character.

These proportions were compared to the proportions of the openings in some modern buildings in the city of Amman. It has appeared randomness and anomalies and reduced the feeling of privacy in one neighborhood. The papers concluded that the re-employment of some heritage elements and their development in buildings will facilitate the designer and planner and benefit from the great inheritance and previous experience that has developed over the centuries. It gives the buildings a distinctive character and does not slip towards randomness and mixed architecture according to.

This paper examines another element that can be developed and benefited from the heritage, which are the entrances of buildings, especially the entrances of Mosques, which have been abnormally shaped and have become a hobby that does not belong to any local, regional, or even global architecture. The traditional function of these entrances did not differ for hundreds of years, to give these Mosques their distinctive features and to display these Mosques in the required explicit form.

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## Entrances

The entrances of buildings are not a gate that is reserved outside the building from the inside, but rather it gives the first impression of the building, whether the style or the condition of the occupant in terms of wealth and poverty, and its social and cultural level, and the nature of the building in terms of function, whether it is a religious, sports or residential building. It is an indication of the place of entry and directing the users to the building. It is a welcome element for visitors to the building and their reception. It is the first expression of features according to (Polpuech 1989).

### Entrances design

There are important considerations that the designer should take into account when designing the entrance to the building:

1. Entrance function: in terms height and width, so that it serves the primary function for it, and it is a barrier between the outside and the inside allowing individuals and cars and possibly loading trucks to enter if the building is designed for that, such as the entrances to hotels, palaces, and public buildings.
2. The general appearance of the entrance: so that it is an integral part of the design of the building and gives a comfortable first impression to the visitor and users, especially the first impression. It is part of the overall design of the building.
3. Entering and leaving the building so that the movement from the main street to the building is allowed in a comfortable manner and without a negative impact on the Public Street, passers-by, or users of neighboring buildings.
4. The entrance achieves safety to the building so that it gives privacy and maintains it. Some entrances have a strict security system and some are open to the public. The degree of security depends on the type of building, the nature of its use and the type of users. There are some buildings that are not even allowed to be approached for tens or hundreds of meters.
5. Cost and maintenance. Whereas, some entrances may cost a lot of money and are in need of continuous maintenance and the maintenance may be daily or periodic and may require equipment, machinery, tools, and special materials.
6. The style and shape be in harmony with space and time, and it does not look odd in the context of the urban design of the street.

### Entrances design development

The entrances are an integral part of the building and therefore the development of these entrances has developed during different historical periods and at different times, just like buildings. The Greek and then the Roman entrances are defined by the columns (typical style of that period) carrying the well-known triangle according to (Earl Baldwin 1956). It has the well-known proportions, the golden ratio, this style was transferred, with all its details, to the borders of the state, to Egypt, Jordan, and other areas. Whereas the ancient Paranoiac entrances were characterized by thick columns with crowns that resemble the lotus flower known to the ancient Egyptians and supported by two rows of statues, preparing for the entrance according to (John 1984). As for the architecture in the Indian peninsula, it was influenced by the craftsmanship and skilled workforce that engraved these entrances until they appeared to be statues of distinguished artists. They overshadowed the decoration on these entrances according to (Bussagli 1973).

Thus, in every historical period and in different geographical regions, special inputs for those eras and geographical regions have developed. As is the case in architecture in general, these styles have evolved over time and have been affected by the following factors:

- Geographical location
- The time it was built
- Available materials
- Contemporary gadgets and technology
- Beliefs and principles
- Economical Status
- External influence as a result of friction between civilizations
- Politics and Power
- There are other factors that affected the buildings in general and the design and implementation of the entrances.

### Mosque's entrances evolution:

Mosques have evolved over time as a human production and have taken multiple forms according to factors affecting the architectural design and implementation of buildings in general: such as natural and climatic conditions, availability of building materials, labor, and social, economic and cultural conditions for each geographical location and for each country. Mosques have preserved some of the essential elements of the functions, such as the large interior space and its orientation, minarets and doors, and the movement of worshipers in and out.

The Mosques were characterized by monumental buildings, spaces and large sizes, compared to the rest of the other spaces. Its designs reflected the political and economical power of the state and were a distinct symbol of the ruler and the state. And it followed a distinctive character for each specific historical period, and this character moved to the regions governed by this state. The Ottoman character in designing Mosques moved to Egypt and to Sham, where the Ottoman Empire arrived. This is also the case of the Mamluk style.

Since the entrances of the Mosques are an integral part of the style of the Mosque, it reflected a clear momentum in its design, and there are many examples of it, such as the entrances of Iranian Ottoman, Mamluk Mosques, Indian Peninsula Mosques, and others. It also reflected the religious, political, economic, and other factors affecting architecture.

(Figure 1) shows examples of these entrances, in different Islamic countries, which all have the following common characteristics:

- These entrances cover architectural design in most Islamic countries.
- All of these entries are momentum expressive, meaning they are very high compared to the human scale and to other building entrances.
- These Mosques cover a wide historical era, such as the Umayyad Mosque in Damascus, which was built in the first century AH and some modern entrances, such as the Agung Natuna Mosque in Indonesia
- All of them are defined by a rectangular frame surrounded by an ornate frame and defined by columns or reliefs to confirm its authenticity.
- The actual entrance to the Mosque reflects the human scale despite the clear frankness of the entrance.
- These entrances are decorated in a way that reflects the local character and artistic capabilities of the region
- There are great similarities in the design of these entrances, and they reflect from the first look at the nature of the back space that was identified
- All of them are clear and straightforward in stating their main functions
- These entrances reflected the type of interior decoration of the Mosque: in the Mosques of Iran they are covered with faience ornamentation and in India engravings on stones and ornament as resemble sculpting, but in Morocco pointed arches surrounded by multiple plaster tombs were used.
- All entrances have two center arches with the exception of the Umayyad Mosque, where the circular arch was the dominant technique in that advanced period of Islamic history.
- These entrances were compatible with the front facade of the Mosque as if it were part of it, and this design was reflected on the rest of the other elements of the Mosque, such as ablution, Sabeel and others.

All of them clearly appear to be the entrances of Mosques, and they cannot be considered otherwise. And if it is found in some entrances to palaces or buildings, it is a copy of the entrances of the Mosques.



Complex of Qalawun, Cairo



Koutoubia Mosque, Morocco



Agung Natuna Mosque, Indonesia



Umayyad Mosque, Damascus



Esfahan Mosque, Iran



Juma Mosque, Uzbekistan

Figure 1. Example of Entrances of Mosques

(Figure 2) shows a group of modern Mosques in the city of Amman, which reflect the randomness and lack of knowledge of the architectural heritage, the experience of architects in Islamic countries, and the feeling of architects that they want to design their own buildings, far from any quotation or tradition, and appearing in the appearance of only me and not admitting any previous legacy.



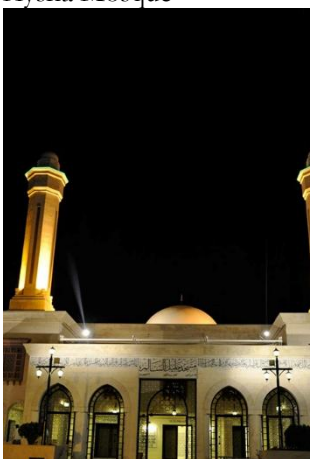
Aysha Mosque



King Abdullah Mosque



Al-Rawdah Mosque, Amman



Khalil Assalem Mosque



Muath Bin Jabal Mosque



Al-Masih Mosque

Figure 2. Examples of new Mosque in Amman

Among the most important characteristics of these modern Mosques:

- Randomness and lack of harmony between them
- These entrances are closer to the entrances of residential buildings or villas
- It does not reflect any style and does not belong to any architectural, artistic or intellectual school
- The lack of knowledge of the foundations of the Mosque's design, as if it were a hall where people would gather to pray and not knowing even the architectural character of Amman or Jordan

- The entrance does not reflect the materials and the interior design of the Mosque
- The little effort made by the architect in designing the entrance or the Mosque
- The architect has little knowledge of Mosques design in the Arabic or other Islamic countries

From this discussion it is necessary for the architect to start employing some elements of heritage, where their function is not changed or developed so that they belong to local architecture or Islamic architecture in neighboring countries.

### **Discussion**

The architects were interested in designing the entrances of the Mosques over the centuries, and these entrances were distinguished as they reflected the architectural style of that historical and geographical era and maintained a clear architectural identity and similarity in the designs and formed a unique architectural model. It also reflected Mosque design, materials, interior design, decorations, and inscriptions that were used inside the Mosque. It was direct way to the Mosque and behind this design a strong architectural idea. These entrances still have the same function for thousands of years and have evolved naturally and the architect was interested in them as much as his interest in the Mosque and featured distinctively the rest of the entrances to buildings, churches or palaces.

Consequently, the use and development of heritage units helps to feel the extension, belonging and entrenching the local architectural style and the architectural identity.

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