The Contemporary Identity of the Architectural Design in the Great Mosque of Algeria

Adel Sekhri 1*, Abdelhalim Assassi 2, Ammar Mebarki 3

1Department of Architecture, University of Biskra, Biskra, Algeria. LACOMOFA Laboratory, University of Biskra, Algeria. LHE Laboratory, University of Setif 1, Algeria.
2Institute of Architecture and Urbanism, University of Batna 1, Batna, Algeria. LHE Laboratory, University of Setif 1, Algeria.
3Institute of Architecture and Urbanism, University of Batna 1, Batna, Algeria. ABE Laboratory, University of Constantine 3, Algeria.

Abstract

Objectives: This research paper deals with the issue of the contemporary identity of the architectural design in the Great Mosque of Algeria, which represents a sign of the future through the use of advanced building materials. The contemporary trend in the construction of the Great Mosque of Algeria made us wonder whether the identity of the cultural heritage of the ancient mosques was considered in its architecture. This research paper aims to clarify the continuity between heritage and historical traditions in the architecture of this contemporary mosque.

Methods: A comparative method was followed, which focused on the identity of the architectural character of the architectural elements that make up the planning system of the Great Mosque of Algeria, and the extent of the impact of heritage on the emergence of this contemporary mosque.

Results: The results confirmed the impact of the historical heritage on the architectural character of the Great Mosque of Algeria, including spatial elements, such as the prayer hall and the courtyard, and the identity of the architectural elements that make up the Mosque, such as the mihrab, the pulpit, the minaret and the dome.

Conclusions: This corresponds to the design direction of the Mosque’s architecture, the direction of belonging. The Mosque is linked to the vocabulary of Islamic architecture and preserves the identity of its architectural character.

Keywords: Great Mosque of Algeria, identity, heritage, architectural design, mosque.

The Contemporary Identity of the Architectural Design in the Great Mosque of Algeria

Adel Sekhri 1*, Abdelhalim Assassi 2, Ammar Mebarki 3

1Department of Architecture, University of Biskra, Biskra, Algeria. LACOMOFA Laboratory, University of Biskra, Algeria. LHE Laboratory, University of Setif 1, Algeria.
2Institute of Architecture and Urbanism, University of Batna 1, Batna, Algeria. LHE Laboratory, University of Setif 1, Algeria.
3Institute of Architecture and Urbanism, University of Batna 1, Batna, Algeria. ABE Laboratory, University of Constantine 3, Algeria.

Abstract

Objectives: This research paper deals with the issue of the contemporary identity of the architectural design in the Great Mosque of Algeria, which represents a sign of the future through the use of advanced building materials. The contemporary trend in the construction of the Great Mosque of Algeria made us wonder whether the identity of the cultural heritage of the ancient mosques was considered in its architecture. This research paper aims to clarify the continuity between heritage and historical traditions in the architecture of this contemporary mosque.

Methods: A comparative method was followed, which focused on the identity of the architectural character of the architectural elements that make up the planning system of the Great Mosque of Algeria, and the extent of the impact of heritage on the emergence of this contemporary mosque.

Results: The results confirmed the impact of the historical heritage on the architectural character of the Great Mosque of Algeria, including spatial elements, such as the prayer hall and the courtyard, and the identity of the architectural elements that make up the Mosque, such as the mihrab, the pulpit, the minaret and the dome.

Conclusions: This corresponds to the design direction of the Mosque’s architecture, the direction of belonging. The Mosque is linked to the vocabulary of Islamic architecture and preserves the identity of its architectural character.

Keywords: Great Mosque of Algeria, identity, heritage, architectural design, mosque.
1. Introduction

Mosque architecture has always received special attention from Muslim and other researchers. Continuing research on mosque architecture in the modern age seeks to understand the influence of the development of technology and the accompanying changes in social and living requirements. Most of this research has dealt only with the consequences of imitation; these researchers simply took architectural terms such as ‘domes’ and ‘arches’ and imposed them on the design of modern mosques. Other research has been characterised by the continuity that lends the character of Islamic architecture and traditional cities their properties of development and sustainability.

The mosque is considered one of the most important buildings of Islamic architecture. The first mosques were identical in shape to the Prophet Muhammad’s Mosque (i.e. Al-Masjid an-Nabawi) (Ahriz et al., 2021), which in addition to prayer included several other functions (Cholil, 2016) such as education, the judiciary and the house of governance. Its architecture is simple: (Tayyab et al., 2016) a rectangular courtyard surrounded by four walls made of mud, a roof made of wicker and leaves, and pillars made of palm trunks (Awan et al., 2014).

In some of its parts, including the rooms of the houses of the Prophet’s wives, it is a covered void, while its other parts are open to the sky (Benkari-Boudidah, 2004). The architecture of mosques developed after the expansion of the Islamic state, becoming a special system with elements added to the architecture to give identifying features to the mosque (Urey, 2013).

The present era witnessed the launch of the construction of the Great Mosque of Algeria in 2012 as the third-largest mosque in the world and the largest in Africa. In its realisation, it relied on the use of modern technologies in the structural, mechanical and environmental systems. It represents a sign of the future through the use of advanced building materials and modern techniques while preserving the authentic historical-style identity. Architectural identity is the distinct architectural elements that indicate the character and identity of a place, which are derived from the plastic heritage. To denote identity in architecture and represent the intellectual and cultural beliefs, it is necessary to research historical backgrounds, which are based on social, cultural and intellectual elements.

A controversial issue has emerged in our modern age, represented in the relationship between heritage (“the heritage mosque”) and the proposals of modernising mosques in the current era. This is one of the most prominent issues affecting the architecture of contemporary mosques. It has led to many questions, including: Does heritage play a role in the architecture of the Great Mosque of Algeria? Does the language of modernity express the identity and formal constants of the mosque?

The main problem of this research paper was to answer four questions related to the formal formulation of the architecture of the Great Mosque of Algeria:

- Does mosque heritage have a role in shaping the contemporary Great Mosque of Algeria?
- What are the identities of its contemporary elements?
- What are the properties related to the spatial configurations of the Great Mosque of Algeria?
- Which architectural elements influence that spatial configuration positively or negatively?

So that the answers are considered as the required results of the research, we have developed the following scientific hypothesis:

- The heritage architectural elements of the mosque are a formal resource for the architecture of the Great Mosque of Algeria.

2. Importance of this research

The importance of this research stems from the study of the architecture of the Great Mosque of Algeria, which expresses contemporaneity, development, modernity and the possibilities of this era. Therefore, this study searches for the architectural elements that form the Mosque and express its heritage identity. The research has gained importance through highlighting:

- The importance and identity of the Great Mosque of Algeria.
- The identity of the design and planning elements of this mosque.
3. Research objectives

This research aims to highlight the importance of attachment to tradition and civilisation and to clarify the harmony and continuity between heritage and historical traditions inherent in the art of architecture of historical mosques and the future aspirations of contemporary and modern mosque architecture. The main objectives of the study are as follows:

- To draw the attention of specialists to the relationship between identity and the issue of modernisation in the architecture of the Great Mosque of Algeria.
- To prevent the neglect of the language of the historical memory of the architecture of historical mosques in the modern architecture of this mosque.
- To highlight the trend towards exploiting modern technologies within the limits of the characteristics of the identity of the traditional architecture of mosques.

4. Research limits

The Great Mosque of Algeria was chosen as a study sample in this research because it expresses contemporaneity, development and modernity and expresses the capabilities of this era. The work of completing this mosque was officially launched on May 20, 2012, and the first operations to complete the mosque’s cement foundations were launched on August 16, 2012. It was opened for prayer in 2020.

5. Research methodology

This research is based on the comparative approach between the Great Mosque of Algeria and the ancient mosques of Algeria. The research included field visits to the original locations of the mosques. Drawings, measurements (surveys) and photographs were accurately taken, requiring great time and effort.

The first step in this research is conceptual definitions, followed by a comparison of the contemporary Great Mosque of Algeria with some ancient mosques in Algeria to prove the research hypothesis, presentations and discussion of results, and recommendations for architects and decision-makers.

6. Concepts related to identity, heritage and the mosque

6.1 Identity

Identity is defined as the essence and reality of a thing. The identity of a thing is its constants, which are renewed and do not change. The identity (Nikezic et al., 2021) of any nation is the characteristics that distinguish it from other nations and express its civilised character (Salman, 2018). Gabr defines identity (Gabr, 2007) as a function of heritage and a source of authenticity, contemporary and culture (Alkouatli, 2018), and defines it linguistically as meaning the same thing, its truth and its own. Identity in architecture is defined as follows: “It is based on a theoretical principle that the architectural elements, shapes and vocabulary reflect the lifestyle of the society that produces them, and the latter includes customs, traditions, ways of thinking, religious beliefs and social values” (Al-Tahlawi, 2008).

6.2 Heritage

Heritage is defined as “elements of the past that are still alive” (Guerroudj, 2000). It is the product of human experiences, and architectural and built heritage, (Bousmaha et al., 2018a) which is a branch of tangible heritage. It is the common constructive thought between human groups, (Assassi, 2017) and it is “a group of facilities that prove their value in the face of the forces of change, and they have become a visual reference on human interaction with the environment, and thus architectural heritage becomes one of the references architectural character and identity of societies” (Molouki, 2020).

6.3 The mosque

The word “mosque” comes from the Arabic verb for “to prostrate,” and its linguistic meaning is a place of submission and humility to God, (Mebarki, 2019) which is one of the main elements that reflect its identity. According to Islamic law, a mosque is a place prepared for prayers. The mosque is the place where Muslims gather to perform their prayers, and to learn everything about Islam to organise and manage their lives (Ridwan, 2014).
A mosque can be defined as a place dedicated to worship, containing a main void (the prayer hall) (Mebarki and Bouchahm, 2019). The entire building may be called the mosque, (Abdel-Hady, 2010) and the term “the mosque” is also used as a description for the inside of the mosque, where preparations for the Friday prayers are made (Wali, 1988).

7. **The most important architectural elements which represent the identity of the historical mosques of Algeria**

Before delving into the identity of the architectural elements that symbolise the Great Mosque of Algeria, we must know that Algeria is rich in mosques of exceptional historical value. The establishment of mosques in Algeria started at the beginning of the eleventh century AD and was characterised by the following architectural elements that symbolise their identity:

- **Prayer hall:** This takes a rectangular shape, raised on columns. It is characterised by the extension of the vertical naves on the Qibla wall, interrupted by bays parallel to the mihrab wall.
- **Courtyard:** This is the open area of the mosque, located behind the prayer hall.
- **Mihrab:** This is located in the centre of the Qibla wall. It is characterised by a niche with an ornate cavity.
- **Minbar:** One of the most important architectural elements in the mosque, this is located to the right of the mihrab, to which the imam of the mosque ascends to deliver the Friday sermon.
- **Minaret:** This is one of the architectural elements that entered the architecture of mosques and with time became inherent in the mosque. In historical mosques in Algeria, the minaret contains two towers, each with a square base: The lower tower is the main tower, and the upper tower is smaller than the lower.
- **Dome:** This is a prominent term in the architecture of the historical mosque. It can play a climatic role and provide lighting for the mosque.

8. **Method**

In this paper, after presenting our case study, we used the comparative method, where we answer the research questions related to identity to understand the logic of the formation of the Mosque through reference to history, by highlighting the role of the formal heritage in shaping the architecture of this contemporary mosque. Examples of architectural elements that symbolise the identity of the historical mosque in Algeria are the Great Mosque in the city of Algiers ‘Djama’a al-Kebir,’ which was built in 1096 AD (Minbar: Figure 9c), the Great Mosque of Tlemcen, which was built in 1136 AD (Mihrab: Figure 7b), (Minaret: Figure 10b), (Dome: Figure 11b), the Sidi Belhassan Mosque in Tlemcen, which was built in 1296 AD, and the El-Helwi Mosque in Tlemcen, which was built in 1353 (Minaret: Figure 10c).

9. **Presentation of the case study**

The Great Mosque of Algeria complex is located near the heart of the Gulf of Algiers in the municipality of Muhammadiyah (Akkermann et al., 2018b) (Figure 1), 10 kilometres east of the old city of the capital, and one kilometre from the Mediterranean Sea. Its full implementation occupies an area of 20 hectares (Figure 2). It is bounded on the north by the highway linking the centre of the capital and the international airport.

![Figure 1. The site plan of the Great Mosque of Algeria (Sekhri, 2018)](image-url)
The prayer hall of the Great Mosque of Algeria has a square base measuring 145 m x 145 m (Sekhri and Bellal, 2018) (Figure 3). It is topped by an internal balcony (the dam) that surrounds it on three sides, and it can accommodate about 35,000 worshipers (Sekhri, 2018).

The prayer hall is crowned with a great dome (Sekhri, 2019) and has two walls containing openings that allow natural light to pass indirectly into the hall. The entrance to the prayer hall is through the main gate that follows the central axis of the direction of the Qiblah. After passing through the entrance decorated with arched ceilings, and semi-structured ceilings, the worshiper arrives at the prayer hall, which has other exits from the north towards the outer corridor and the south towards the southern garden.

The mihrab consists of a polygonal section topped by a small dome, resting on a square base (Tabbalat, 2015), and in the middle is a horseshoe arch inspired by Almoravid architecture (Bousmaha et al., 2018b) (Figure 7). The mihrab is located on the Qibla wall in its middle.

The minbar is made of wood inlaid with a set of circles and inscriptions of different geometric dimensions. It consists of 12 steps: the length of each step is 2 metres, the length of its front facade is 2 metres, the length of its side facade is 7.5 metres, and its height is 7.5 metres (Figure 9). It is located to the right of the mihrab, and it can be hidden mechanically in
the basement because it is only used during Friday prayers and holidays.

The courtyard (Figure 6) is located between the prayer hall and the outer courtyard. It is square in shape, with a side length of 145 metres. It contains the water basins, the colonnaded courtyard, and transparent umbrellas. The northern and southern wings adjacent to the courtyard of the Mosque embrace the places for ablution, and there are other ablution halls located in the basement floor. Its ceiling is 7 metres high. The courtyard also contains octagonal floral columns surrounding the central courtyard of the Mosque's courtyard, whose role is to cast abundant shadows over this square. The transition from the outer courtyard to the courtyard of the Mosque takes place through an axial threshold containing the places designated for placing shoes along its sides.

The minaret occupies an important position in the Great Mosque of Algeria because it contains a history museum and a research centre in the historical and scientific fields, and because of its towering height of 265 metres (Akkermann and Hewener, 2014; Akkermann et al., 2018a). The minaret is double the height of the top of the lighthouse roof. It rests on a 26.5-metre square base (Constantinescu and Köber, 2013), and a square body. The minaret (Figure 4) is separate and far from the prayer hall, and it is located on the north-western side of the hall. In building the minaret of the Great Mosque of Algeria, a proportional design technique was adopted, as it is the product of a balance in proportionality between dimensions, while respecting the standards of traditional Moroccan minarets. The cavity of the minaret of the Great Mosque of Algeria is decorated with geometric shapes and lines derived from Islamic architecture, and the external facade of the minaret of the Mosque is decorated with geometric inscriptions (mashrabiya). The main tower of the mosque's minaret consists of the following elements:

1. The Museum: Spread over 15 floors, it is a history museum.
2. Research Centre: The research centre occupies the top ten floors of the minaret.

At the top of the minaret, the tower is located (Figure 4). It consists of four floors and the roof of the minaret (podium), which allows visitors to enjoy the stunning splendour of the 360° views of the capital and its suburbs.
The Mosque contains a dome with a diameter of 50 m and a height of 70 m. It crowns the middle of the prayer hall (Figure 3), in which the functional and aesthetic aspects are mixed. It is composed of an inner and an outer envelope (Figure 5). The dome rests on eight columns, its inner wall consists of folds, and folds with openings that allow the natural light to pass indirectly to the prayer hall. These openings are used for natural lighting and ventilation.

10. Identity analysis

At this stage, we move to the comparative study, where we will answer the research questions related to the identity of the architectural elements that make up the Great Mosque of Algeria, to understand the logic of the formation of the Mosque by referring to history (Chemrouk and Robert, 2018) ‘Table (1)’, especially to the historical studies of heritage mosques in Algeria, and to the testimonies of officials of the National Agency for the achievement and management of the Great Mosque of Algeria and its management:

1. The prayer hall of the Great Mosque of Algeria (Figure 6) derives its design from the forms of Maghrebian prayer halls raised on columns. The courtyard of the Great Mosque of Algeria (Figure 6) is located behind the prayer hall, like the Great Mosque of Algiers and the Great Mosque of Tlemcen.

![Figure 6. Plan of the prayer hall and courtyard of the Great Mosque of Algeria](image)

2. The design of the mihrab of the Great Mosque of Algeria (Figure 7a) was inspired by the mihrab of the Sidi Belhassan Mosque in Tlemcen (built in 1296), and the mihrab of the Great Mosque of Tlemcen (built in 1136) (Figure 7b), as it derives from the architectural character of the Almoravid state. The columns on the right and left of the mihrab of the Great Mosque of Algeria (Figure 8a) are inspired by the columns of the mihrab of the Sidi Belhassan Mosque in Tlemcen (Figure 8b).

![Figure 7. Facade of the mihrab of the Great Mosque of Algeria and the mihrab of the Great Mosque of Tlemcen ‘Algeria’: (a) The mihrab of the Great Mosque of Algeria, 2021; (b) The mihrab of the Great Mosque of Tlemcen, 2021](image)
3. The design of the minbar of the Great Mosque of Algeria (Figure 9a) was inspired by the traditional Maghrebian minbar, made of wood inlaid with a group of circles and inscriptions of different geometrical dimensions, quite similar to those of the Minbar of the Great Mosque in the city of Algiers ‘Djama’a al-Kebir’ (built in 1096) (Chebaiki-Adli and Chabbi-Chemrouk, 2015) (Figure 9bc), which was built during the reign of the Almoravid state during the eleventh century.

4. The design of the minaret of the Great Mosque of Algeria was inspired by traditional Maghrebian minarets. It consists of two towers: the lower tower is the main tower, with a square base, and the upper tower is smaller than the lower tower; it also has a square base. Thus, the minaret of the Great Mosque of Algeria (Figure 10a) is quite similar to the Zian minarets consisting of two towers, which were built in the Great Mosque of Tlemcen (Figure 10b), the Sidi Belhassan Mosque in Tlemcen, the Mechouar Mosque in Tlemcen, the Sidi Ibrahim Mosque in Tlemcen, and the El Helawi Mosque in Tlemcen (built in 1353) (Figure 10c). The minaret of the Great Mosque of Algeria relies on the proportional design technique, as it is the product of a balance in proportionality between the dimensions.
Figure 10. General views of the minarets of mosques in Algeria: (a) The minaret of the Great Mosque of Algeria, 2017; (b) The minaret of the Great Mosque of Tlemcen (Algeria), 2021; (c) The minaret of the El Helawi Mosque in Tlemcen ‘Algeria’, 2021

5. In the design of the dome of the Great Mosque of Algeria (Figure 11a), a mixture of functional and aesthetic aspects was taken into account, as it is composed of an inner and an outer cover: from the inside it is a modern reading of the traditional Muqarnas dome, which we find especially during the Almoravid era, in particular in the dome of the Great Mosque of Tlemcen (built in 1136) (Figure 11b). From the outside, the dome is covered with decorative mashrabiya plaques that highlight the inner face of the dome according to traditional geometry.

Figure 11. The dome of the Great Mosque of Algeria from the outside, and the dome of the Great Mosque of Tlemcen, Algeria: (a) A picture from the outside of the dome of the Great Mosque of Algeria (Sekhri, 2018); (b) Interior view of the dome of the Muqarnas in the Great Mosque of Tlemcen (Algeria), 2021

Table (1): The identity of the architectural elements that make up the Great Mosque of Algeria

<table>
<thead>
<tr>
<th>Architectural elements design for the Mosque</th>
<th>The identity of the architectural character of the architectural elements that make up the Mosque</th>
<th>The heritage identity of the decorative formations of the architectural elements that make up the Mosque</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer hall</td>
<td>The forms of prayer halls in the Maghreb, raised on columns.</td>
<td>The use of marble and natural stone in decorating the prayer hall, and the use of decorations and inscriptions on the walls and columns show the characteristics of Islamic architecture.</td>
</tr>
<tr>
<td>Courtyard</td>
<td>The courtyard of the Great Mosque of Algeria is located behind the prayer hall, like the Great Mosque of Algiers and the Great Mosque of Tlemcen.</td>
<td>The octagonal floral columns surrounding the central courtyard of the mosque's courtyard were used in the courtyard of the Great Mosque of Algeria.</td>
</tr>
</tbody>
</table>
Architectural elements design for the Mosque | The identity of the architectural character of the architectural elements that make up the Mosque | The heritage identity of the decorative formations of the architectural elements that make up the Mosque
---|---|---
Mihrab | The mihrab of the Great Mosque of Tlemcen is derived from the architectural character of the Almoravid era. The columns on both sides of the mihrab are inspired by the columns of the mihrab of the Sidi Belhassan Mosque in Tlemcen (Built in 1296). | The mihrab of the Great Mosque of Algeria is surrounded by a frieze of artistic calligraphy and transparent stone.
Minbar | It was inspired by the minbar of the Great Mosque of Algeria ‘Djama’a al-Kebir’ (built in 1096). | The Mosque’s minbar is made of wood inlaid with a set of circles and inscriptions of different geometrical dimensions.
Minaret | The design of the Great Mosque of Algeria minaret was inspired by the square-shaped traditional minarets of the Maghreb. It is quite similar to the Zian minarets consisting of two towers, which were built in the Great Mosque of Tlemcen, and the Mosque of El Helawi in Tlemcen (built in 1353). | The hollow of the Mosque's minaret is decorated with geometric shapes and lines derived from Islamic architecture.
Dome | It was inspired by the dome of the Great Mosque of Tlemcen (built in 1082). | A decorative mashrabiya screen is installed on the outside of the Mosque's dome, and on the inside is a modern interpretation of the traditional Muqarnas dome.

Table (2) shows that the features of the formal inheritance of the architectural elements embody the resource for the emergence of the Great Mosque of Algeria:

<table>
<thead>
<tr>
<th>The formal heritage of mosque architecture</th>
<th>Site</th>
<th>Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prayer hall</td>
<td>West side of the prayer hall</td>
<td>Rectangular</td>
</tr>
<tr>
<td>Courtyard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mihrab</td>
<td>Qibla wall</td>
<td>A niche in the Qibla wall</td>
</tr>
<tr>
<td>Minbar</td>
<td>Right of the mihrab</td>
<td></td>
</tr>
<tr>
<td>Minaret</td>
<td>It is located on the western side of the prayer hall, separated from it</td>
<td>Square</td>
</tr>
<tr>
<td>Dome</td>
<td>Middle of the prayer hall</td>
<td>Circular base</td>
</tr>
</tbody>
</table>

11. Discussion of results

Based on the comparative study between the Great Mosque of Algeria and the historical mosques of Algeria, the hypothesis of the plastic heritage of the mosque was affirmed. As it is a constant factor in the formulation of expressive vocabulary for the contemporary architecture of the Great Mosque of Algeria, it can be said that the goal of the research has been achieved. The prayer hall of the Great Mosque of Algeria derived its design from the forms of prayer halls Moroccans raised on columns, and the design of the mihrab was inspired by the mihrab of the Great Mosque of Tlemcen, which is derived from the architectural character of the Almoravid state. The design of the pulpit was inspired by the pulpit of the Great Mosque in Algiers. The design of the minaret of the Great Mosque of Algeria was inspired by the traditional square-shaped Moroccan minarets, and the design of the dome of the mosque was inspired by the dome of the Great Mosque of Tlemcen. Thus, the identity of the character of the architectural elements of the Algiers Mosque was confirmed based on the prayer hall, the courtyard, the mihrab, the minbar, the minaret and the dome.
12. Conclusions

Through this architectural study of the Great Mosque of Algeria, it was concluded that the Mosque designed by the German complex, consisting of the two German studies offices KSP Jürgen Engel Architekten and Krebs Und Kiefer, has a religious, cultural and scientific character dating to an important period, the era of independence. It is the third-largest mosque in the world, smaller only than the Two Holy Mosques in terms of area, extending over an area of 20 hectares, and it is the largest mosque in Africa.

Through the comparative study of the Mosque, the identity of the architectural character of the architectural components of the planning system of the Great Mosque of Algeria was confirmed from the prayer hall and the courtyard, and the identity of the architectural elements that formed the Mosque from the mihrab, the minbar, the minaret and the dome. Thus, the design direction of the Mosque’s architecture agrees with the direction of belonging. The Mosque is linked to the vocabulary of Islamic architecture and preserves the identity of its architectural character, using it in a developed context and with modern techniques. The link to the local geographical scope depends on the use of traditional symbolic elements such as the minaret and the dome.

The decoration of the Great Mosque of Algeria was derived from Islamic architecture and is an accurate summary of the intermarriage of several arts. The mashrabiya was used on all the facades of the Mosque and the external facades of its minaret, and the mihrab of the Great Mosque of Algeria was surrounded by a frieze of artistic calligraphy and transparent stone. The pulpit of the Mosque is made of wood inlaid with a set of circles and inscriptions of different geometrical dimensions. The hollow of the Mosque’s minaret was decorated with geometric shapes and lines derived from Islamic architecture. A decorative mashrabiya screen was installed on the outside of the dome of the Mosque, and inside is a modern reading of the traditional Muqarnas dome. All these decorative formations in the Great Mosque of Algeria represent its heritage identity.

For the future development of contemporary mosque architecture, we make the following recommendations for architects and decision-makers:

- Expand the field of research on the design of the architectural forms of contemporary mosques.
- Exploit the creativity of the architects of ancient mosques in past centuries to develop contemporary mosque architecture according to modern technologies and environmental requirements.
- Employ all the innovations of modernity in modern building materials in contemporary mosques.
- Keep pace with the technical progress of this era, provided that the character of the local heritage is preserved.
- Revive the heritage of mosques, in line with the contemporary requirements of mosques, to enhance their identity.
- Enable contemporary architects to ensure continuity between the past, present and future in their designs of contemporary mosques and pay attention to the environmental dimension and sustainability.

References


Gabr, I. M. I. (2007, October). Mosque architectonics is frame restrictions and newness source … A study in the signs of making use of the heritage. Proceedings of the first international conference on Architectural and Islamic arts “the past, the present and the future”, Islamic universities league, Cairo, Egypt.


