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Addition and Expansion in the Architecture of the Holy Shrines (Revaluation)

Zainab A. Munshed[1*] and Ammar Saleh Ashour[2]

[1] *Architecture department - Baghdad University, Baghdad, Iraq, zainab.abbas1604a@coeng.uobaghdad.edu.iq*

[2] *Architecture department- Baghdad University, Baghdad, Iraq, ammar.ashour@coeng.uobaghdad.edu.iq*

* *Corresponding author*:Zainab A. Munshed , zainab.abbas1604a@coeng.uobaghdad.edu.iq

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Abstract: With the emergence of significant changes across all aspects of life and their profound impact on the development and modification of functions, it becomes essential to adapt buildings, whether they are heritage, historical, or modern. In light of these changes, there arises an urgent need to achieve this adaptation with new or modified functions by utilizing space, structure, or construction beside or above the existing building. The architecture of holy shrines emerges as one of the most important examples highlighting the urgent need for expansion and addition to accommodate the increasing number of occupants and the growing, diverse communal functions such as congregational prayers, visits, Quran recitation sessions, and more.Moreover, many global literatures and examples have addressed the concept of expansion and addition in historical, heritage, and even modern buildings. However, there is a lack of local knowledge, especially regarding additions and expansion in the architecture of holy shrines. Thus, the research problem can be diagnosed as a lack of local knowledge, studies, and applications related to additions and expansions in the architecture of holy shrines, along with a reassessment of these experiences compared to successful global experiences to evaluate how well they meet the needs of their occupants.The research aims to extract indicators from global experiences and study concepts to achieve the adaptive reuse of buildings through expansion and addition, applying them to the architecture of holy shrines on one hand, and on the other hand, reassess local experiences in the holy shrines, particularly in the governorates of Karbala and Najaf, attempting to identify points of success and failure to serve as a basis alongside successful global indicators for future experiments.

Keywords: Addition, Expansion, Holy shrines, Re-evaluation.

1. Introduction

The holy shrines represent pivotal points in cultures and religions around the world. They are sites imbued with deep religious and spiritual values, serving as centers for contemplation and worship. These sites boast rich histories and deep traditions, not merely serving as places of worship but also as locations that intertwine history, spirituality, and identity. They reflect their uniqueness through architecture, arts, rituals, and traditions, each distinguished by its own characteristics, making them cultural legacies deserving of preservation and respect .

As the world evolves and social and cultural circumstances change, the holy shrines face challenges in preserving their identity and sanctity while adapting to contemporary needs. Preserving these places requires careful balance between heritage conservation and tradition on one hand, and accommodating modern developments and meeting the needs of today's societies on the other. One of the most prominent challenges facing the buildings of the holy shrines is thecontinuous increase in the number of visitors and the consequent growth in the required facilities and amenities, alongside keeping pace WH technological and cultural advancements, necessitating continuous adaptation of the holy shrines.

Therefore, continuous adaptation of the holy shrines is required to accommodate the continuous increase in the number of visitors and the consequent growth in the required facilities and amenities, alongside keepi pace with technological and cultural advancements.

2. Literature Review

Many studies have approached the subject from various perspectives. Some focused on the concepts of addition and expansion in buildings, and some examined the architecture of the holy shrines.

Literature in the first axis discussed the effectiveness of addition and expansion in keeping historical and heritage buildings abreast of changes. Studies such as [14, 11, 3,4,20] emphasized the importance of employing strategies of addition and expansion to enable buildings, to accommodate societal changes and underscored the significance of studying the history and architecture of these buildings to choose appropriate types of additions, preserving their uniqueness and heritage value. Additionally, they explored different levels of the addition and revitalization process, both materially and spiritually, considering the role of architectural vision in defining these levels. They highlighted the impact of addition and revitalization measures in bringing about functional and expressive changes in existing buildings. On the second axis, There are also studies that addressed the holy shrines such as [19, 2, 12, 23] , which examined the formation methods of many buildings and urban forms existing in the historical nuclei of ancient Arab and Islamic cities at present and the effects resulting from their development and verifying the space awareness.

Through this comparison, and from observing studies related to the concepts of addition, expansion, and holy shrines, we notice the knowledge need to discuss the role of addition and expansion in creating functional changes for the buildings of the holy shrines when facing challenges that require these intervensions.

Therefore, research is assumed after studying the related concepts as follows: "The importance of evaluating the experiences of additions and expansions of the buildings of the holy shrines in Najaf and Karbala through and selecting appropriate strategies for future expansions in other shrines.

3. Additions

*I*n architecture, the notion of "addition" is intricately tied to both its intellectual and material dimensions, as architecture is a product of human thought and creativity. On one hand, it is the visible outcome that engages with the thoughts of the beholder. In it, the designer presents their ideas, harnessing their abilities and skills in working with materials to create a product that aligns more closely with existing or new needs, or for the sake of change and diversification [18] .Referring to the material aspect of "addition," Byard defined it as the process that creates what can be called "composite works." These are instances where a new structure is added to an existing building to meet the need for change and to create a new shared identity that expresses new meanings. [7]

So "Addition" refers to the process of introducing change to a building by adding a new physical entity to the existing structure, for a specific need to enhance its previous function or to create a new function for it. This addition can be contradictory or complementary, intellectually or materially, to the old building, achieving integration between the original and the added entity within a specified timeframe.

4. Expansion

The term "expansion" in architecture refers to the addition made to a building for the purpose of increasing its area. It is defined as "an increase in the capacity or size of the building, whether vertically to increase height or depth, or horizontally by increasing the horizontal area" [20]. The concept of expansion involves a physical activity that includes adding spaces and possibly changing functions. Expansion can be functional or can involve increasing the number of occupants, necessitating new construction vertically or horizontally, above or below ground level, and may include changes to the facade [17]. Studies also indicate that expansion involves extending the floor area of a building or adding a separate building annexed to the original building [13].To differentiate between the processes of addition and building expansion, a study by Douglas [10] outlined criteria to determine whether the added construction should be considered an expansion of the original building or not, based on specific conditions:

- There must be accessibility between the two buildings, which is essential for purposes such as fire escape or public access to all parts of the building. This is typically achieved by adding openings in the adjacent wall of the existing building or by creating a connecting passage at ground level or on an upper floor to link them through an existing opening in the building requiring expansion.

- Both buildings must be used by the same occupants, even if their uses are different.

- The design of the added construction should complement the existing building, even if it is not identical to it. There should be a physical connection between the added construction and the existing building, with the degree of this connection varying depending on the size, nature, and location of the addition.

5. Types of Additions

Researchers have discussed various methods for classifying different types of expansion additions to existing buildings. Some classified them [16] based on the levels of interaction between the old and the new into:

1- Building within the existing building: This involves constructing additional structures inside the existing building.
2- Building above the existing building: This entails adding floors above the existing building.

3- Building around the existing building: This involves constructing additional structures around the existing building.
4- Building adjacent to the existing building: This involves constructing additional structures adjacent to the existing building.

Alternatively, another classification is based on the direction of the expansion additions, as follows:

1- Horizontal Expansion (Adding on): This is one of the most common architectural additions. Horizontal additions usually take the form of wings or structures built besides the original building, influenced by the existing building through interpreting its formal expressions.
2- Vertical Expansion (Adding over): This involves adding floors above the building. This type of addition often affects old heritage buildings, and its success is usually challenging due to the dominance of the addition, overshadowing the identity of the old building. [7]
3- Internal Expansion (Internal Expansion): This refers to introducing an additional structure within the building structure for the purpose of creating internal expansions. For example, adding internal levels where there is a higher-than-normal height from the floor to the ceiling. [9]
4- Addition as Enclosure: This means enclosing the entire existing building with the addition, completely losing the identity of the original building within the new part. [16]

6. International Case studies

The trajectory of material developments can be used to extract valuable tips and design lessons for local development cases. Here are some global examples :

6.1 *Hamad International Airport in Qatar (An example of Horizontal Expansion):*

The building is located in Doha, Qatar, and was constructed as a replacement for the old Doha Airport, which was demolished due to its small size and inability to meet the growing needs of the city. Construction of Hamad International Airport began in 2006, involving land reclamation from the Arabian Gulf, constituting 60% of the project site. This endeavor included moving 6.5 million cubic meters of waste materials for landfill purposes, making it the largest environmental project in the Arabian Gulf. Construction was completed in 2009, but technical reasons prevented its opening until December 2011. The airport was officially inaugurated in 2014. [24] The airport's capacity is approximately 50 million passengers annually upon completion of the final phase by 2020. Hamad International Airport spans an area of 29 square kilometers and features two runways, measuring 4850 meters and 4250 meters, respectively, the world's largest separation between runways, capable of accommodating Airbus A380 aircraft. [25] To increase capacity and enhance passenger experience, the airport was expanded by adding a new terminal and other spaces. As the host country of the 2022 FIFA World Cup, Doha began expanding the central concourse of Hamad International Airport in 2019 to accommodate more than 58 million passengers annually. The project was completed and opened in November 2022. The capacity of the building was increased by adding new spaces and blocks that harmonize with the original building block and are connected to it. The development includes adding a central concourse extending from the existing building, maintaining the sweeping shape resembling sand dunes of the station. Additionally, a column-free lattice structure, 85 meters long, supported by three glass-covered, gradually punctuated paths for natural central light penetration and temperature control, supporting continuous internal green spaces and visitor embrace. The project focuses on enhancing and managing limited resources to maximize benefits for the building. [26] The added garden includes various plant species sourced from sustainable forests worldwide. The retail and food and beverage area, covering 11,720 square meters, is part of the expansion and includes over 65 retail outlets and restaurants spread over three floors. Additionally, adding airlines and new destinations played a significant role in the expansion and modernization of Hamad International Airport. The airport has become a major travel hub in the Middle East.[25] . Summarizing what has been added to the airport, the facilities recently opened include: the central concourse - the garden, retail, food and beverage venues, North Plaza Lounge, Coral Business Lounge - the park, remote baggage facility, where bags can be tracked, retrieved, and rerouted automatically, virtual air traffic control tower, West Taxi and the development of the 10 square kilometer wing. There will be an additional 34 parking spaces for new western aircraft and 5 new aircraft parking spaces located on a Victor Taxiway. This is in addition to 140 aircraft parking spaces at the airport and western and central fuel farms.[27]

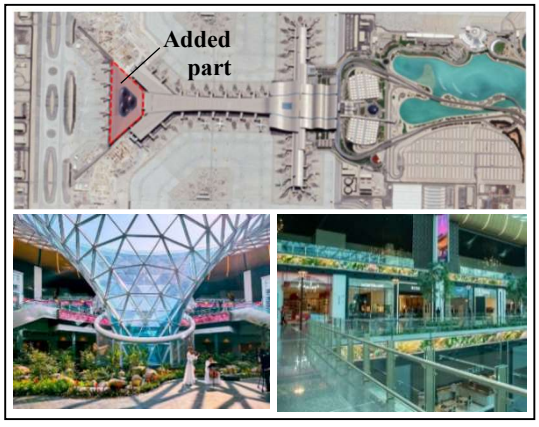

Figure 1: Hamad International Airport after expansion [27]

6.2 *The Port House (An example of Vertical Expansion) :*

The building is located on the island of Mexico in the port of Antwerp, Belgium, which is the second-largest cargo port in Europe. The original building dates back to the early 20th century as a fire station for the port. "The fire station was designed in 1912 with a vertical tower for drying fire hoses, but only 20 meters of it were built. On April 26, 1954, a fire broke out on the roof, resulting in three-quarters of the roof burning, and only the southern part was saved.[28] A new concrete roof structure was then implemented. The building was listed as a heritage site in 2000, as little remained of the interior except for the columns and concrete floors." The historic building remained neglected after the construction of a new fire station for the port of Antwerp until the proposal to operate the building as a management hub for administrative and technical functions of the port. [29] "In 2007, when the former offices of the Antwerp port from the 1990s became too small, the port decided that the move would allow its technical and administrative services to be present together in one place, providing offices for around 500 employees. The port needs a sustainable and future-oriented workplace for its employees that reflects its values and ethics in a growing local and international arena. The waterfront location has great benefits for sustainable construction, as materials and building components can be transported by water, a significant requirement for achieving the port's environmental goals. After the construction of a new fire station, the old station became unused, so a change of use was adopted to ensure its preservation.[30]" The idea of Zaha Hadid Architects was to add a block above the historic building supported by a separate concrete column structure from the historical building. "The massive extension is over 100 meters long, almost matching the size of the former fire station underneath. The extension is covered with triangular sides - some transparent and some opaque - arranged to create a level surface at the southern end and a rippling texture echoing water in the north. The alternating transparent and opaque panels aim to visually fragment the volume of the structure. They also provide plenty of daylight, shade, and views of the Scheldt River, the city, and the port for the workers."[29] After consulting heritage specialists to deal with the building, analyze it, and study its history, Zaha focused on the intended role of the tower in the original design, which was never realized. "Zaha Hadid's architectural analysis and historians showed the intended role of the tower in the original, beautiful design of the old station. It was intended to be a magnificent crown adorning the grand volume of the building below and was never achieved."[31] She also described the new block as resembling a ship. "The new extension points towards the Scheldt and is like the bow of a ship, connecting the building to the river on which Antwerp was founded. The facade of the new extension is surrounded by water, resembling a rippling, glassy surface that reflects the changing degrees and colors of the city sky." The added new block is based on a modern structure housing elevators created inside the courtyard of the historic building (which was roofed with a glass ceiling) on one side and on the other side on a column outside the historic building. "The new extension consists of four floors and covers an area of 60 square meters. It is supported by a carved inclined column containing a fire escape that meets the ground and by an elevator structure rising from the courtyard of the original building. The space between the old and new buildings is a park for viewing and reception events, and inside the addition, all floors are open-plan offices."[30]

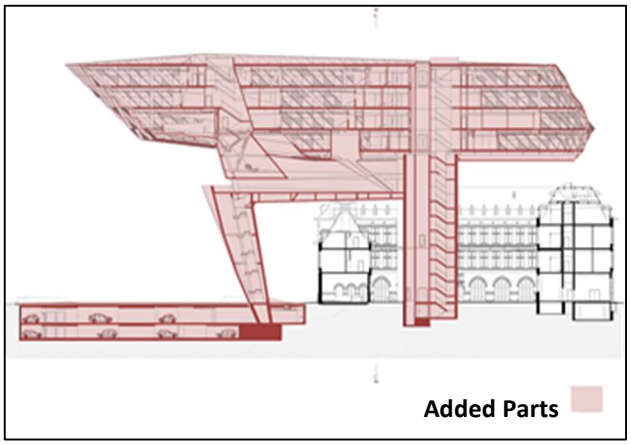

Figure 2: expansion of The Port House [31]

6.3 *LocHal Library (An example of Internal Expansion):*

The LocHal Library is located in Tilburg, Netherlands, and the building was renovated by the architectural firm Braaksma and Roos, with engineering consultancy provided by Arup on aspects such as sustainability, reuse, and acoustic design. The original structure was built in 1932 in the former railway yard, now part of the urban renewal project in the Spoorzone area. It used to function as a workshop for train manufacturing and maintenance, employing many residents of Tilburg and playing a significant role in shaping the city .The railway square was completely closed to the public until its operations ceased in 2011. Stories about trains, massive engines, work conducted, machines, and sounds resonated within local households across generations. Therefore, the building stands as a symbol representing the former glory of the railways."[6] The decision to repurpose the building was made by the municipality of Tilburg. In 2015, the municipality selected an architectural firm to renovate and convert the building, with the multidisciplinary team of Braaksma & Roos, Civic, and Inside Outside winning the competition. The transformation of the workshop began in 2017. [15]

The building is characterized by its massive structure, originally constructed to accommodate its function as a train maintenance workshop. The idea of reuse involved reinterpretation of the original building, dating back to 1932. The main structure sets the rhythm and language of

the new architecture. Perhaps the most prominent feature of the building is its immense size, with a footprint of 90 × 60 meters and a height of 15 meters, both imposing and inviting simultaneously .The entrance hall takes the form of a covered square resembling a city square, equipped with large reading tables (serving as platforms), exhibition areas, and a coffee kiosk. The space features wide staircases that can be used by individuals or as seating for events for over a thousand spectators . [32] The result is more akin to a covered square than a building, with a terraced open view reminiscent of an amphitheater, hosting the library, Seats2Meet area, and artistic institutions on and beneath these levels. The flooring, once the central element in the train warehouse where everything happened, now highlights various levels from public and vibrant to more intimate spaces on the upper levels. Six massive and movable textile walls define the scale of the building, delineate different spaces, and improve acoustics. The ascending terrace reveals what was previously inaccessible, tactile: crane carriers, rails, and the splendid steel structure with layers of old paint still visible. Moreover, daylight filters through glass facades filled with compressed threads. In the past, you could only look up towards the light; now you can walk towards it, with the high point being the city balcony, offering a view over the city of Tilburg. [33]

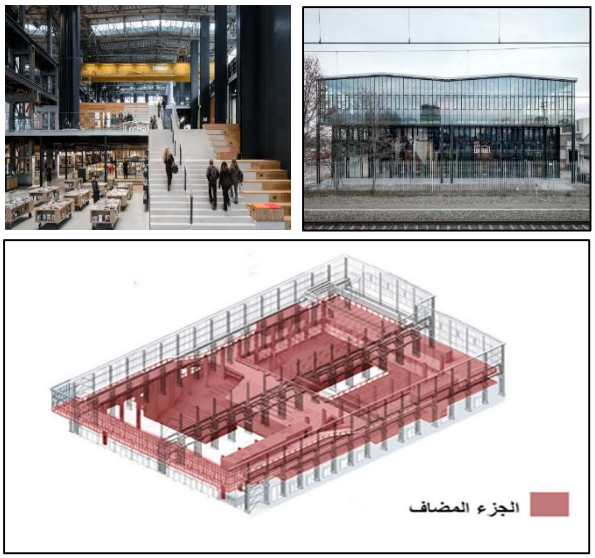

Figure 3: expansion of LocHal Library [32]

6.4 *The headquarters building of SARCO (South American Restaurant Corporation)*

The building is located on the island of Puerto Rico in the United States. It was redesigned by the HACEDOR: MAKER/arquitecto studio and dates back to the 1980s when it was originally constructed as part of an industrial area. The original structure was characterized by its enclosed and dark structure, featuring sloped concrete walls, a steel roof, and beams and columns .The building, totaling approximately 4600 square meters, was constructed using precast concrete walls, a steel roof, and columns and beams. It comprised a warehouse area of about 2900 square meters and a smaller administrative wing of 1600 square meters .[34] The original building had minimal windows, creating a dark and enclosed environment with only peripheral offices having visual access to the outside. [35]

The building was purchased by SARCO (South American Restaurant Corporation), and the transformation process was completed in 2015 .The building was converted to serve as the new administrative headquarters for a South American restaurant company. The new program required increased openness in the layout, façade, and roof to facilitate a more efficient function and natural lighting. Most of the interior walls were removed, and private offices were repositioned around the periphery, this time using glass interior walls integrated with new window openings. Multiple skylights were added to allow natural light penetration into the building .While the original building allowed for only 30% of the workspace to be naturally lit, the new design provides natural light and exterior views to 70% of the workspace; only 10% of the space now lacks orientation towards the outside. Additionally, the old reception entrance area was addressed by removing all unnecessary surfaces (doors, storefront, suspended ceilings) and re-equipping it with glass and an exposed concrete canopy. [34]

Figure 4: Interventions of SARCO building [35]

The original standing entrance canopy was retained but camouflaged using a custom aluminum screen made of pipes and angles on the façade, serving as a sunshade and architectural concealment of the previous façade style.The project retained 90% of the original structure, walls, and roof, but with strategically placed new building envelope modifications, internal space reconfiguration, new surface finishes, and furnishings. Entrance, cafeteria, and main corridors were refurbished with concrete floors, while office spaces were covered with colored carpets .Due to ample natural lighting during sunny days, a "smart" lighting control system was introduced. This system automatically adjusts the new LED-based lighting

according to sunlight levels to maintain consistent illumination throughout the day. The same "smart" control tools also manage the highly efficient air conditioning system, which adjusts its output based on general environmental conditions and occupancy in each area .[35]

7. Analyzing International Case studies

After discussing a range of global experiences, the cognitive aspects provided by these experiences in the field of describing the additions and expansion which will be identified. To facilitate understanding of these interventions process and its related indecators as shown in the table below:

Table 1: Indicators for Interventions related to the additions &expansions in buildings

The intervention	Indicators			References
Addition	Small	Renewing finishes		[10]
		Adding adjustable elements (doors, windows, etc.)		
	Medium	Adding small spaces		
		Adding means of movement		
	Large	Adding new buildings		
		Adding new floors		
Expansion	Horizontal	The available land on the site	Space availability	[7] [8]
			Usability	
		Access to the added part	Need for quick access	
			Not necessary	
		Functional relationship of the added part with the building	Continuous	
			Separate	
	Vertical	Durability of the existing structure	Addable	[7] [8]
			Not addable	
		Mass form	Continuable	
			Not continuable	
	Internal	Durability of the existing structure	Addable	[9]
			Not addable	
		Dimensions of spaces	Space area	
			Space height	
	Around the building	Surrounding land	Space availability	[9]
			Usability	
		Flexibility of the existing structure	Extendable	
			Not extendable	

8. Local Case studies

8.1 *Imam Hussein holy shrine :*

The roots of the construction history of the sanctuary, dome, and minarets existing in the Al-Husayniah Shrine date back to the thirteenth century [5]. However, significant changes occurred primarily in the last decade when numerous developments affected the building and the hierarchical system of spaces and internal activities.

One of the most important manifestations of this development is the golden covering of the minarets, which began by Sultan Ahmad ibn Awaisah along with the extension of the courtyard.

Historical sources confirm that the current architecture dates back to the renovation ordered by Uwais Al-Jalliri in 1311 AD, followed by continued development, additions, and restorations in various historical stages [2]. Then, Abbas Shah Safavid restored the mausoleum with copper, bronze, and tiled the dome with Kashan tiles. Both the dome and minarets were covered and decorated with gold by Mohammad Shah Qajar. These developments became symbols or customs reflecting piety, sanctity, and virtue through the architectural form increasingly used in building shrines in the Islamic world.

In the subsequent decades, architects and urban designers followed these traditional built forms and components, including shrines, mosques, golden.

domes, minarets, courtyards, and iwans of shrines in the Middle East. [22]

- **Addition and Expansion:**

After 2003, numerous changes occurred to the building due to the increasing number of visitors, especially during religious occasions. One of the most prominent changes was the roofing of the courtyard with movable roofs and the addition of a perimeter building adjacent to the external arcade [2]. This was followed in 2016 by the commencement of a new expansion as part of a larger plan to expand the Al-Husayniah Shrine, which is still ongoing to this day. The new additions greatly affected the sensory perception of the spaces, which were divided from one space into several spaces due to the roofing, and changed due to the altered perspectives resulting from the mosque's expansion and the addition of roofing.

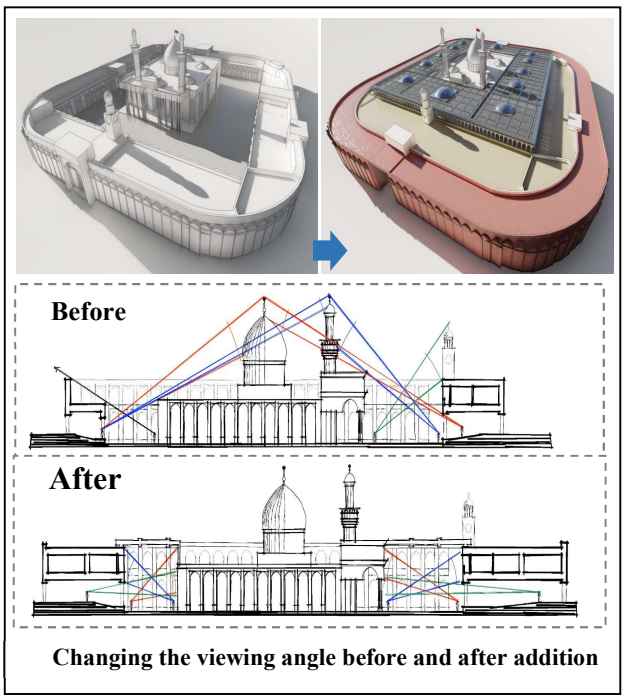

Figure 5: Interventions of Imam Hussein holy shrine [11]

8.2 *Imam Ali holy shrine:*

One of the oldest books describing the Alawite Threshold is Ibn Battuta's "The Gifts of the Observers in the Marvels of the Capitals and the Wonders of the Journeys", where historians mention its construction dating back to the tenth century AD, built during the Buwayhid dynasty era and remained until Ibn Battuta witnessed it [22]. The current architecture of the revered Alawite shrine, ordered by Shah Abbas I Safavid in 1614, replaced the Ilkhanid architecture. The Shah gathered builders, engineers, and invested substantial funds to construct the dome, arcade, and the noble courtyard, which stands today [21]. Since the mid-sixteenth century, the shrine has remained a pivotal point in the old city. Its architectural significance lies in its internal and external design elements, including the outer wall, the five main gates, the courtyard (sahn), the golden iwan, the two golden minarets, the shining clock, the golden dome, and the shrine. In 9861, a portion of the adjacent heritage area to the shrine was removed by the central government, which included a collection of traditional religious schools, for various reasons, including political ones, leaving the area empty for over a decade [1]. In 2012, work began on the expansion of the Alawite Threshold by adding a horizontal extension to the west, connected and adjacent to the threshold, in the abandoned area, which was previously a heritage site.

- **Addition, Expansion:**

The new expansion covers an area of approximately 61,000 square meters, roughly equivalent to four times the existing building, consisting of four floors, two of which are underground. It hosts various diverse activities, including a religious school, library, museum, guesthouses, parking facilities, and various services, in addition to a mosque representing an extension of the threshold mosque to accommodate a larger number of visitors. The new addition was built using Islamic architectural style to emulate the original building style of the Alawite Threshold, incorporating its elements such as arches, arcades, and iwans.

9. Conclusions

- The lifespan of a building is finite; it either ceases to perform its proper function or its capacity to adapt to changes decreases. Therefore, it must be re-adapted through various treatments, including addition and expansion in all its forms.
- Through studying successful international experiences where expansion and addition were used to re-adapt buildings, it became evident that there is a difference and diversity in these concepts. The types include horizontal, vertical, internal, circumstantial, and structural.
- The thresholds (shrines and their annexes) were designed and implemented long ago, and they underwent addition and expansions to accommodate the challenges of increasing numbers of visitors and their services. However, some expansions were not well-thought-out and were made with quick decisions that did not consider the future.
- Processes of addition and expansion post-2003 were carried out in selected thresholds as case studies. With increasing challenges, expansions in Imam Hussein holy shrine: included horizontal, vertical, internal, and circumstantial aspects. However, with continued horizontal expansion, some aspects failed. Imam Ali holy shrine, expansion was of a temporary type, openable and closable, achieving positive addition. Horizontal expansion also included adding Courtyards with raised questions.

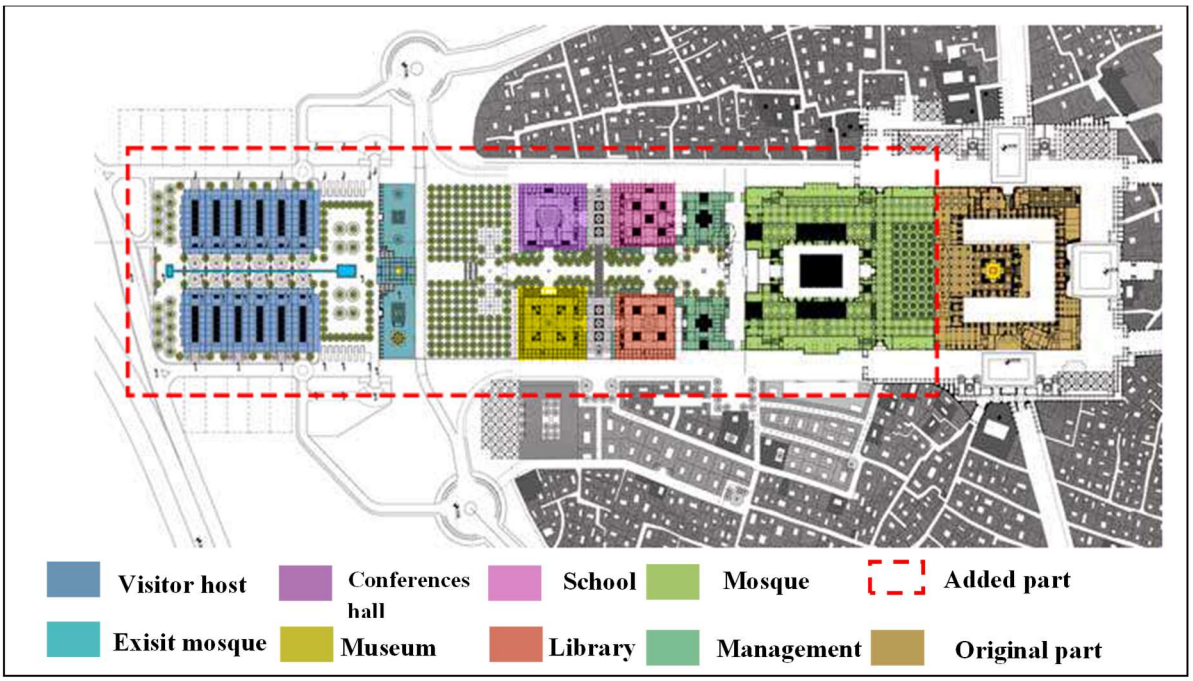

Figure 6: Imam Ali holy shrine after expansion (by author adapted from [36])

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الإضافة والتوسعة في عمارة العتبات المقدسة (إعادة تقييم)

زينب عباس منشد[1]، عمار صالح عاشور [2]*

[1] هندسة العمارة ، جامعة بغداد ، بغداد ، العراق ، zainab.abbas1604a@coeng.uobaghdad.edu.iq

[2] هندسة العمارة ، جامعة بغداد ، بغداد ، العراق ، ammar.ashour@coeng.uobaghdad.edu.iq

* الباحث الممثل: زينب عباس منشد ، zainab.abbas1604a@coeng.uobaghdad.edu.iq

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الخلاصـــة – مع ظهور التغيرات الهامة التي تحدث في جميع جوانب الحياة وتأثيرها العميق على تطور وتعديل الوظائف، يصـــبح من الضـروري تكييف المباني، سـواء كانت تراثية أو تاريخية أو حديثة. في ضـوء هذه المتغيرات الحاصـلة، ينشـأ الحاجة الملحة لتحقيق هذا التكييف بوظائف جديدة أو معدلة من خلال استخدام الفضاء، والهيكل، أو البناء بجانب أو فوق المبنى الحالي. تبرز عمارة المزارات الشريفة كأحد أهم الأمثلة التي تبرز الحاجة الملحة للتوسـع والإضـافة لاسـتيعاب العدد المتزايد من السـكان والوظائف الجماعية المتنوعة المتنامية، مثل الصـــلوات الجماعية، والزيارات، وجلســـات قراءة القرآن، إلخ.علاوة على ذلك، تناولت العديد من الأدبيات والأمثلة العالمية مفهوم الإضـافة والتوسع في المباني التاريخية، والتراثية، وحتى الحديثة. ومع ذلك، يوجد نقص في المعرفة المحلية، خاصـةً فيما يتعلق بالإضـافات والتوسـع في عمارة العتبات المقدسـة. لذا، يمكن تشـخيص مشـكلة البحث على أنها **قلة في المعرفة المحلية والدراسـات والتطبيقات المتعلقة بالإضـــافات والتوســع في عمارة العتبات المقدســة، جنبًا إلى جنب مع إعادة تقييم هذه التجارب مقارنة بالتجارب العالمية الناجحة وتقييم مدى تلبية احتياجات سـكانها.**يهدف البحث إلى اسـتخلاص مؤشـرات من التجارب العالمية ودراسـة المفاهيم لتحقيق التدخلات على المباني من خلال التوسـع والإضـافة وتطبيقها على عمارة المزارات الشـريفة من جهة، ومن جهة أخرى إعادة تقييم التجارب المحلية في المزارات الشـريفة، خاصـة في محافظتي كربلاء والنجف، محاولة تحديد نقاط النجاح والفشل لاستخدامها كأساس إلى جانب المؤشرات من التجارب العالمية الناجحة في التجارب المستقبلية.

الكلمات الرئيسية – الإضافة، التوسعة ، عمارة العتبات المقدسة ، إعادة تقييم