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The Influence of Zaha Hadid's Roots and Heritage on her Architectural Approach

Tara Azad Rauof

Department of Architecture, Faculty of Engineering, Cihan University- Sulaimaniya, Sulaimaniya, Iraq

Email: tara.azad@sulicihan.edu.krd

Abstract:

In addition to her books, essays, interviews, and studies, Ms. Zaha Hadid was a remarkable architect known for her deconstructivism style, which has been called inventive, flamboyant, radical, and revolutionary. She thought that an architect is far more than just a Renaissance master.

Zaha emphasized the significance of using architecture to infuse cultural values into society. She was the most qualified architect to be sent on that mission if that is how it should be. Her famous interpretation "It's not about being nationalistic or patriotic; I cannot erase back the years I spent in Iraq. And I really enjoy the nation" evoked the central concept for this study. Does her architectural approach reflect her background? The research begins with a list of the pertinent aspects and characteristics of Islamic architecture, followed by a philosophical analysis of Zaha's four proposed designs, two of which are intended to be built in Europe and the others in the Middle East, despite the fact that two enrollment were not chosen as a winner.

The conflict between her style's Eastern and Western inspirations has never been clearly established. By examining some of her designs in the Middle East and contrasting them with the components, and characteristics of Islamic architecture, in order to answer the question posed earlier.

Key words: Culture, Deconstructivism, Islamic Architecture, Muslim Architect, Zaha Hadid.

الملخص:

بالإضافة إلى كتبها ومقالاتها ومقابلاتها ودراساتها، كانت السيدة زها حديد مهندسة معمارية رائعة اشتهرت بأسلوبها التفكيكي، الذي وُصف بأنه مبتكر ومبهج وراديكالي وثوري. كانت تعتقد أن المهندس المعماري هو أكثر بكثير من مجرد معلم في عصر النهضة.

زها كانت تشدد على أهمية دور الهندسة المعمارية لبث القيم الثقافية في المجتمع. لقد كانت المهندسة المعمارية الأكثر تأهيلاً لإرسالها في تلك المهمة. مقولتها الشهيرة "الأمر لا يتعلق بكونك قوميًا أو وطنيًا؛ لا أستطيع أن أمحو السنوات التي قضيتها في العراق. وأنا معجبه حقًا بهذه الأمة" أثار المفهوم الرئيسي لهذه الدراسة. هل يعكس نهجها المعماري خلفيتها الثقافيه؟ يبدأ البحث بقائمة من المبادئ والخصائص ذات الصلة بالعمارة الإسلامية، يليها تحليل فلسفي لأربعه من تصاميمها، اثنان منها من المقرر بناؤهما في أوروبا والآخرين في الشرق الأوسط.

الصراع بين الإلهام الشرقي والغربي في أسلوبها المعماري لم يتم الجزم فيه الى الأن بشكل واضح. من خلال هذا البحث سيتم تحليل بعض تصميماتها في الشرق الأوسط ومقارنتها مع مبادئ العمارة الإسلامية ، في محاولة للإجابة على السؤال المطروح سابقا.

الكلمات المفتاحية: الثقافة، التفكيكية، العمارة الإسلامية، المعمارية المسلمة، زها حديد.

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پوختە:

جگە لە کتێبەکانی، وتارەکانی، چاوپێکەوتن و لێکۆڵینەوەکانی، زەها حەدید تەلارسازێکی سەرکەوتوو بوو کە بە شێوازی (تفکیکي) ناسراوە وە بە داهێنەر، دڵخۆشکەر، ڕادیکاڵ و شۆڕشگێڕ وەسف دەکرا. ئەو پێیوابوو کە ئەندازیاری تەلارسازێ زۆر زیاترە لە مامۆستایەکی ڕێنیسانس.

زەها جەختی ئەکرد لەسەر گرنگی ڕۆڵی تەلارسازی لە بڵاوکردنەوەی بەها کولتوورییەکان لە کۆمەڵگادا. شارەزاترین ئەندازیاربوو کە نێردرا بۆ ئەو ئەرکە، لێکدانەوە بەناوبانگەکەی: " پەیوەندی بەوەوە نییە گەر نەتەوەپەرستبیت یاخود نیشتمانپەروەر بیت, ناتوانم ئەو ساڵانە بسڕمەوە کە لە عێراق بەسەرم بردووە, وە من بەڕاستی سەرسامم بەم نەتەوەیە" چەمکی سەرەکی ئەم توێژینەوەیە وروژاند. ئایا ڕێبازی تەلارسازییەکەی ڕەنگدانەوەی پاشخانی کولتوورییەتی هەیە؟ توێژینەوەکە بە لیستی بنەما و تایبەتمەندییە پەیوەندیدارەکان بە تەلارسازی ئیسلامییەوە دەست پێدەکات، دواتر شیکارییەکی فەلسەفی بۆ چوار لە دیزاینەکانی زەها دەخاتە بەردەست ، کە دووانیان لەوانە بڕیار بوو لە ئەوروپا و ئەوانی تریش لە ڕۆژهەڵاتی ناوەڕاست دروست بکرێن.

هێشتا ناکۆکی نێوان ئیلهامبەخشی ڕۆژهەڵاتی و ڕۆژئاوایی لە شێوازی تەلارسازییەکەیدا بە ڕوونی دیاری نەکراوە. لە ڕێگەی ئەم لێکۆڵینەوەیەوە بەشێک لە دیزاینەکانی لە ڕۆژهەڵاتی ناوەڕاستدا شیکاری و بەراورد لەگەڵ بنەماکانی تەلارسازی ئیسلامی بۆ دەکرێت، ئەمەش لە هەوڵێکدا بۆ وەڵامدانەوەی ئەو پرسیارەی کە پێشتر خراوەتە ڕوو.

1- Muslim Architect!!!

Is the legendary Zaha Hadid acknowledge as a Muslim first or as an architect first, all of both or none of both?

Her liberal, open-minded upbringing gave her the freedom to experiment with new ideas and developed her critical thinking skills. Her artistic development was greatly influenced by her exposure to a wide range of cultures while always emphasizing the significance of her heritages. She took the first step toward defining her marginality in life by enrolling in a Christian school. "As a Muslim, I never had a conventional education. Islamic culture and Arab culture are the same in the Arab globe. It's not a religious situation; it's a cultural one (Giovannini, 2004).

These elements offer us a sense of the setting in which she created her architectural design (Levene Richard and Fernando Marquez, personal communication, 1998).

Zaha Hadid fought against the stigmatization of the Muslim minority in the west. Whether or not her designs are deconstructive, they are contemporary in quality and demonstrate how well she uses a crucial creative aesthetic when she designs. The power of Islam compels Muslim communities around the world to adapt materials, techniques, and design principles, forming them dynamically specially from the face of persecution, in spite of all attempts to undermine the image of the Islamic history.

2- Islamic architecture….

The phrase "Islamic architecture" encompasses a very broad range of elements, from Baghdad to Samarqand and Istanbul, to the Dome of the Rock in Jerusalem and the Taj Mahal in Agra. They have a number of architectural languages with overlapping aspects, but they are not all the same, and when taken together, they give rise to a distinct family of distinctive architectural styles.

Because the design and development of the vast majority of structures in the Islamic world are affected by the spirit of Islam and Islamic culture, it is vital to pinpoint some distinctive characteristics

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inherent in Islam as a cultural phenomenon. Due to its utilization of distinctive allusions, elements, and features that distinguish it from other structures.

Since Islam's inception, a vast variety of secular and sacred architectural forms have been incorporated into Islamic architecture. The mosque, the tomb, the palace, and the fort are the four main styles of Islamic architecture that are most well-known. Each has distinctive components, and this study will compile the lexicon of the Islamic architectural style to inform its quest for an Eastern influence in Zaha's work.

3- Element of Islamic Architecture…

3-1 Minarets…

A tall, generally a tower that stands alone with a [octagonal or square] tiny cross section. The base, the shaft, and the gallery are its three vertical levels. There are several regional architectural styles, depending on the locality, such as those that are ringed by spiral staircases or end in covered balconies.

The call to prayer, which is given from the top of the minaret, was the primary purpose of the earliest minarets. But the minaret also serves another very effective purpose: natural air cooling. This happens as the sun heats up the dome, pulling air in through open windows and discharging out through the shaft, as natural ventilation works (Steele, 1994).

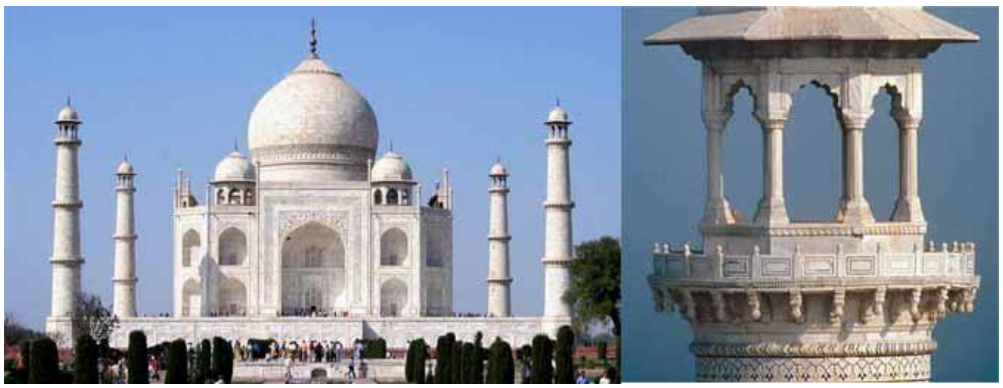

Figure 1. Taj Mahal

3-2 Domes…

At the time it was considered to be one of the most ingenious structural designs. It can be positioned either across numerous arches that span a square foundation or on a simple circular base. Many Domes have a special structure with an opening called a lantern that serves as the cupola's lighting and ventilation system. Nowadays, there are additional architectural creations, particularly in areas with wildly varying summer and winter temperatures, (Steele, 1994)..

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Figure 2. Dome of the rock

Figure 3. Mohammed Ali Mosque Egypt

3-3 Iwans- domed chambers…

An important feature of Islamic architecture that was first developed in Sassanid-era Persia. One way to describe it would be with vaulted spaces that are open on one end. One prominent example of the four Iwan scheme's original design being distorted is the Sultan Hasan mosque-madrasa in Cairo. The four Iwan scheme is widely used in Islamic architecture as a single, well-balanced design, but tragically, it rarely lasted throughout the years in its original, undamaged form.. (Grub, 1978).

Figure 4. Taj Mahal

Figure 5. The Great Mosque of Damascus

3-4 Arches…

The Islamic civilization developed arches as a wonderful, ingenious method of spanning a corner. There are many different shapes for arches, including round, elliptical, pointed, and inflexible. Today, they are also utilized, such as in bridges (Steele, 1994).

Figure 6. Round Arch-Elliptical Arch- Pointed Arch

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3-5 Courtyards…

Courtyards are enclosed private spaces that are exposed to the sky and are combined with buildings. They are typically utilized in homes or mosques. It serves two purposes, the first of which is to provide privacy and security. On the other hand, it also serves a climate purpose, such as shielding the building from the wind, sun, and other elements of the outside environment.

Figure 7. Madrasa of Sultan Hassan Egypt

Figure 8. Al-Azhar Mosque Egypt

3-6 Arabesques…

It evolved into a more distinctive aspect of Islamic construction. It depends on using specific geometric shapes symmetrically, changing their scale to create a pattern, and duplicating them to generate a variety of effects. The magnificent Islamic art form of arabesque is used to decorate the walls of nearly all Islamic structures. (Steele, 1994).

Figure 9. Arabesque

3-7 Calligraphy…

The term "calligraphy" refers to creative writing. It is the use of Arabic letters that has been refined to a purer form. The walls and ceilings are decorated with linear and circular ornamentation. Calligraphy initially appears in the Qur'an, the holy book of Islam, albeit it is frequently too complex to read. (Grub, 1978).

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Figure 10. Friday Mosque Isfahan

Figure 11. Taj Mahal

3-8 Water…

Water can be considered as an essential element of Islamic architecture in such hot Islamic surroundings, signifying wealth, fertility, and coolness. This makes it one of the most beautiful aesthetic elements, as well as acting as a cooling and watering system in Islamic gardens, since it reflects as a mirror, multiplies patterns, and highlights them visually throw expanding beyond the limits of the physical. The use of water results in channels and pools that are both dynamic and fluid but static; they are both ever-changing and unchangeable. Water channels that fill basins and stream downward from room to room are made of marble. Courtyards usually have pools to promote a sense of openness and calm.

Figure 12. Taj Mahal

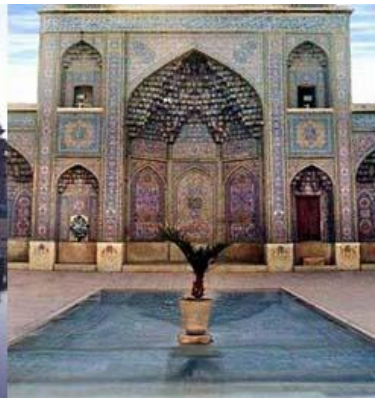

Figure 13. Nasir-ol-Molk Mosque Iran

4- Features of Islamic architectural tradition…

A thorough investigation of the Islamic architectural legacy is now required to bring to light some obscured key elements that can be used to future study.

4-1 Abstraction…

Islamic architecture is characterized by abstraction, which implies that nearly no particular form cannot be modified to serve a purpose other than the one for which it was originally intended. In the other direction, a Muslim building with a particular function can take on a variety of forms. The four Iwan layouts, which are employed by mosques, madrasas, spas, and private residences, are a superb example of a perfect, absolute scheme that may serve numerous functions instead of needing to be designed for a particular purpose.

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The absence of a connection between the design or the scheme and the location is another instance of abstraction in Islamic architecture. Instead of first assessing the site to design a building that suits the place, any scheme can fit at any moment to any location.

Figure 14.

Madrasa al-Mustansiriya in Baghdad

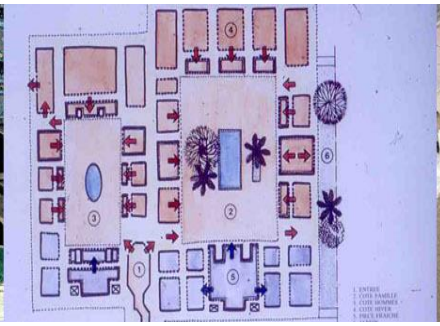

Figure 15.

plan of a House Zawareh in Iran

figure 16.

Mosque of Ibn Tulun in Egypt

4-2 Irregularity…

The Irregularity of planning is one of the intriguing aspects of Islamic architecture. Most of the time, there is no sign of direction other than an atypical cell structure. Every component of the structure is converging on the original plan's precise center. Another characteristic that is closely related to this problem is the lack of physical direction, which causes an imbalance that is always evident in all Islamic structures. When an architectural design lacks an axial quality, it indicates that the building's many components are swimming around equally. This made it possible for organic growth to take place in almost any direction by only adding new components to the initial idea.

One of the best examples of this is the design of mosques like the Friday mosque in Isfahan. European architecture contrasts sharply with this because of its clear direction and well-balanced design. The only possible exception to this rule may be the four-Iwan courtyard pattern, which is meant to be a single balanced unit. For this reason, it is consistently recognized as a pre-Islamic, Iranian idea.

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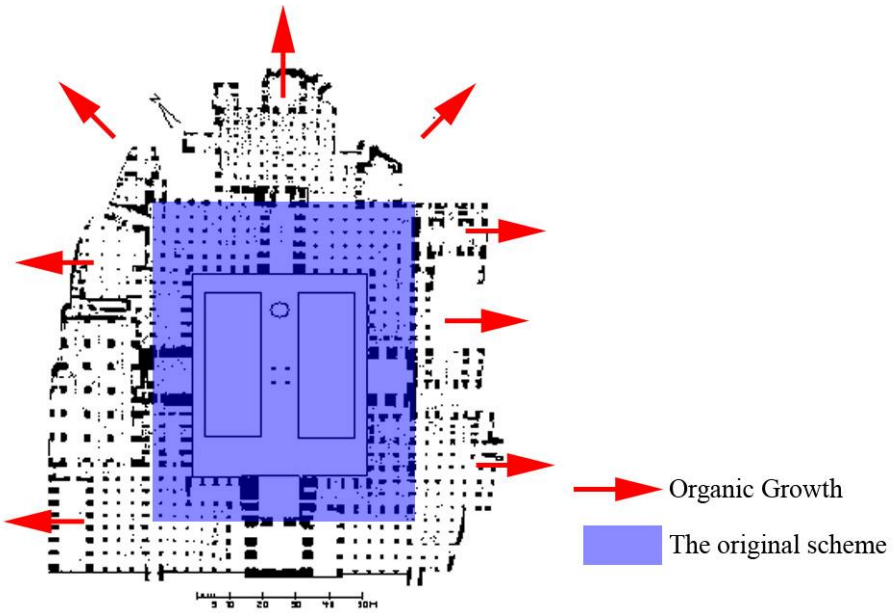

Figure 17. Irregularity

Each component of the building, which has an uneven cell structure, is gathered around a certain location in the original plan.

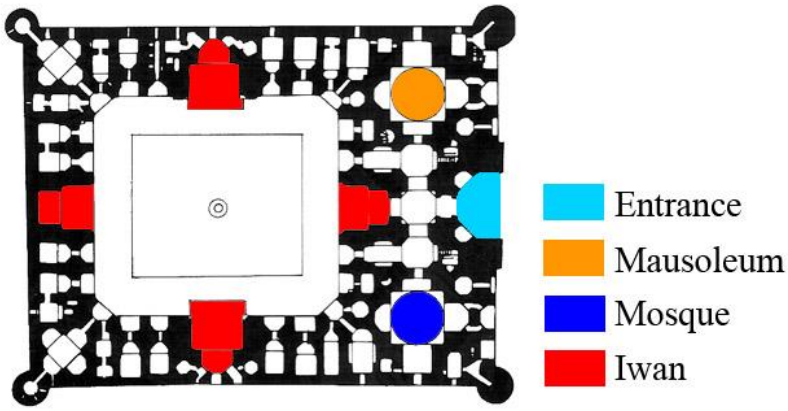

Figure 18. Four Iwan courtyard plan is irregular; it is intended to be one balanced unit.

4-3 Hidden architecture…

The most prominent feature of Islamic architecture is its complete focus on internal space as opposed to exterior space, creating a striking contrast between an interior courtyard and outer walls that are unadorned, unarticulated, and windowless. Because the function, purpose, and even the internal organization are not stated, this attitude lends the outside envelope a mysterious appearance. To truly penetrate and experience the interior of the building, you must actually enter it. When you do, the rich atmosphere will usually surprise you. Many architects are still striving incredibly hard to achieve such a surprising aspect in another frame. The Great Mosque of Damascus, built during the Umayyad era, is a prime example of hidden architecture.

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Figure 19. Hidden architecture, Extreme contrast between the interior courtyard and the exterior wall.

4-4 Non Tectonic effect…

Arabicesque and calligraphy are widely used as decorative elements in Islamic architecture. In addition to serving aesthetic functions, decorations also help to create a non-tectonic value, indicating that Muslims focused particularly on omitting or even covering up structural components that are typically articulated in other styles of architecture, such as European architecture. Another striking difference between Islamic and European architecture is that the later tries to maximize the perception of unlimited space by adornment while the former emphasizes the illusion of being weightless.

In this instance, adornment produces a visual denial of the weights, stresses, and loads present, as well as the need for support, which was always of the biggest importance in European architecture.

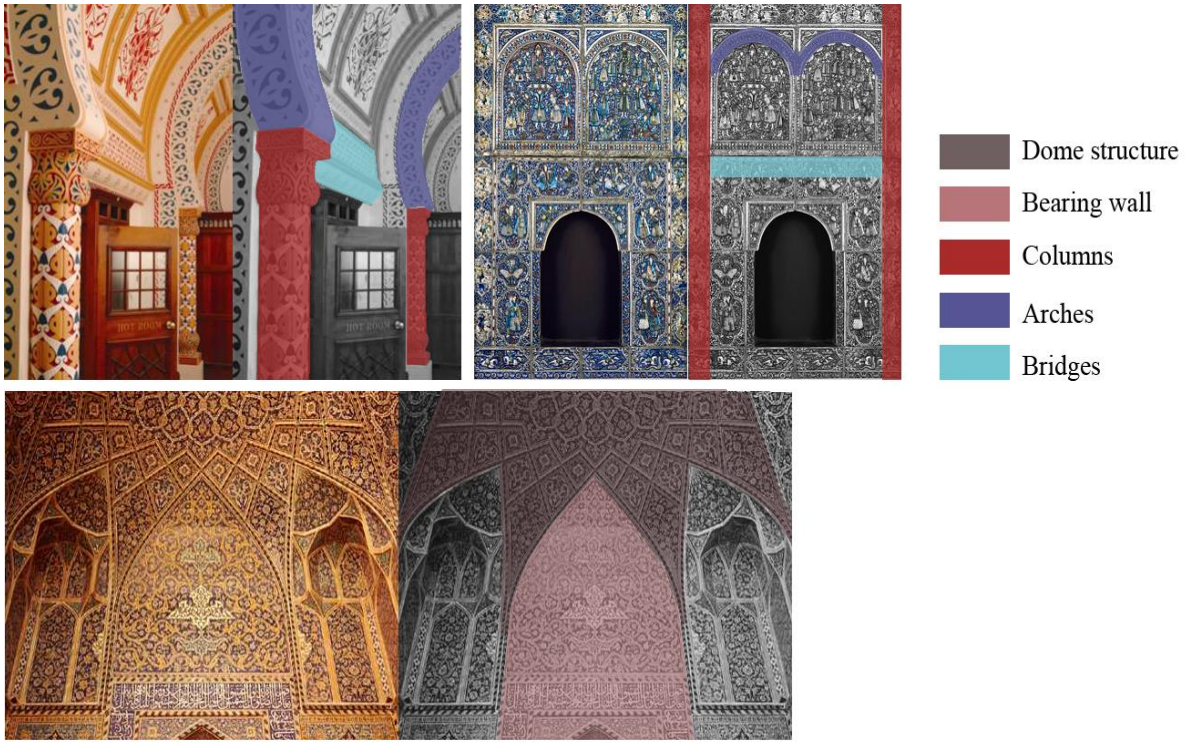

Figure 20. Visual negation of the necessity of structure

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4-5 Orientation…

The south or southwest orientation is the most popular in the world because it ensures the best use of the sun and all other advantages related to this matter. Other than the mosque, the majority of the monuments in the Arab world are all facing the same direction. A matrix that resembles the home of a spider, would be created by connecting every invisible axes that run throughout all mosques around the world to the Quibla in Mecca, the birthplace of Prophet Muhammad as the ending circle, and a hollow cube named Kaba, would be the focal point of the matrix. It is diagonally orientated, with a corner that faces the compass's cardinal directions. The design of a mosque is determined by this liturgical orientation, with every space changing along this axis (Hillenbrand, 1994).

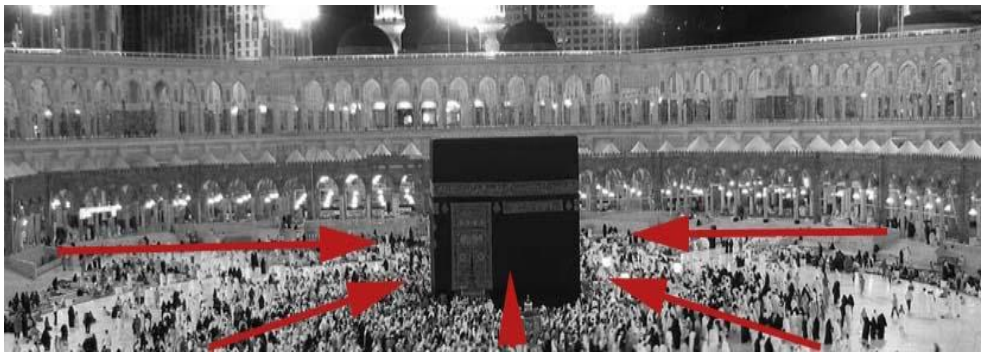

Figure 21. Orientation

5- Regional versus Universal…

A crucial question, the one that will serve as the research's essential premise, is raised after discussing the most pertinent aspects of Islamic architecture in this study.

Can we acknowledge the importance of architecture on a local or global scale?

Would an architect create an Islamic-looking structure that fits the environment if to be asked to construct, for instance, the American embassy in the Middle East? Or would he construct a building with Islamic cultural value if he were requested to build the embassy of any Middle Eastern nation in the USA?

We must begin by addressing a different query, namely, how an architect designs, in order to respond to the issues given above.

Two essential forces have a significant impact on how an architect conceptualizes or visualizes a design. The first of these two major influences is culture, which in my opinion may be compared to a vast reservoir that changes periodically but is nonetheless very rich and serene and provides constant nourishment for the architect. Aspirations, which are extremely variable and dynamic, are the second one. While these two forces have quite distinct causes and effects from one another, they are always interacting. As a result, while certain goals may be transient, others may become deeply ingrained in the society. (Hillenbrand, 1994).

The aforementioned influences have an equal impact on all forms of art, from the purest forms, like poetry and music, to considerably more difficult forms, like architecture. We must take into

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account two additional forces that affect architecture more than any other art form in order to comprehend the position of the design as a point along the axis that runs between those two forces [see Figure 22].

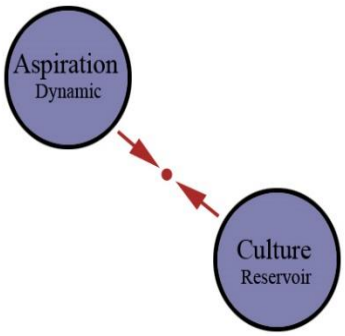

Figure 22. Diagram 1

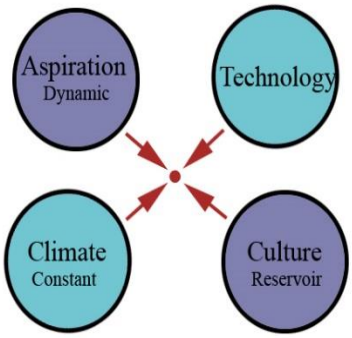

Figure 23. Diagram 2

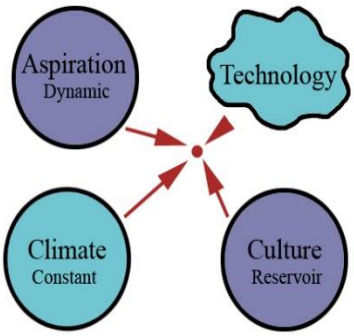

Figure 24. Diagram 3

The architect must have complete control over all the complications that can arise due to climatic factors such as sun, wind, and rain, which are the first and most fundamental and immutable forces. Climate condition culture, including its expression, ceremonies, and rituals, is deeply ingrained (Hillenbrand, 1994). Climate can serve as a source of inspiration, as shown in atriums with sky-facing openings. Technology is the most recent force affecting architecture. The most emotive factor, it affects architecture immediately and depends heavily on time. Every ten years, technology advances, necessitating the relocation of the point (see Figures 23 and 24).

As technology advances, architects are forced to switch out some materials for newer ones. This forces them to choose between two options: either they use the new technology to replicate an outdated aesthetic, like the modern domes that superficially resemble older structures, or they adopt a hybrid approach. Alternately, acquire the materials through a transformation process and reimagine the architectural embodiment of the epic ideals they stand for (Isozaki, 1986). Both methods can be used; the difference is that the second is full of difficulties that keep the architecture fascinating and renewable no matter how the technology advances, but the first method yields a shallow, weakened outcome with no nourishment.

Therefore, the resolution of these four factors operating on the design's transformation process results in architecture outcomes.

Accordingly, I think that architecture is regional because it expresses the four main factors of culture, aspiration, climate, and technology rather than because it travels back to the realm of facial images. Even if there are always certain concerns that are universal, they ultimately are tied to the underpinning, deeply rooted structure.

Despite everything described previously, architecture is not by definition regional and unique to each architect. Because of this, I questioned if Zaha Hadid's style is regional, universal, or neither. She does, in fact, take conventional spaces in her hand and manipulate, slide, and squeeze them to the limit while yet managing to achieve a good balance. One of the Pritzker jurors, Karen Stein, said something noteworthy. Zaha Hadid has made a career out of challenging preconceived notions about architectural space, practice, representation, and construction. She then went on to define her balanced

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extreme, which is in some ways profoundly entrenched in conventional architecture. "We perceive a very novel and elegant balancing of extremes here." Zaha was always an engaging source of information for the European community.

6- Research cases.

Four projects of Zaha Hadid have been chosen namely Le Grande Mosque de Strasbourg located in France, the Islamic art museum located in Doha Qatar, the Abu Dhabi sculpture bridge additionally, but not least the department of Islamic art located at Musée du Louvre France, regardless of whether they are realized or just remained as competition design. It is important to note that two of them are intended for construction in the Middle East.

The first stage will be to evaluate such projects by contrasting them with the characteristics and qualities of Islamic architecture that have already been presented. The first project, the Le Grande Mosque de Strasbourg, will be simpler due to its similar purpose.

6-1 Islamic Architecture elements and features versus Le Grande Mosque de Strasbourg France 2000.

The competition design's renderings make it difficult to immediately identify the structure as a mosque because it lacks many of the characteristics that make traditional mosques in the Arab world easy to recognize. The first identifiable picture is an abstract work of art that only represents itself. Was Hadid motivated to conjure up such a false impression or to produce a fresh interpretation of the tried-and-true plan?

Design concept:

The plan is made up of a matrix of several spatial areas that are created by crossing two axes. The first axis is the river's curve in one direction and the axis for prayer, or Qiblah. These two axes meet at a point where volumes are created and fractalization occurs. By highlighting the liturgical orientation toward Quibla, which is still the primary determinant of the architecture of traditional mosques (Grub, 1078), and by linking it with another axis of the context, she begins to reimagine established ideas. The mosque, which serves as the project's overall focal point, occupies the project's core or intersection point. The mosque itself is therefore the center of this directional field. The mosque itself is therefore the center of this directional field. Therefore, its spatial significance is understood as being above and beyond the specific architectural components, see Figure 25.

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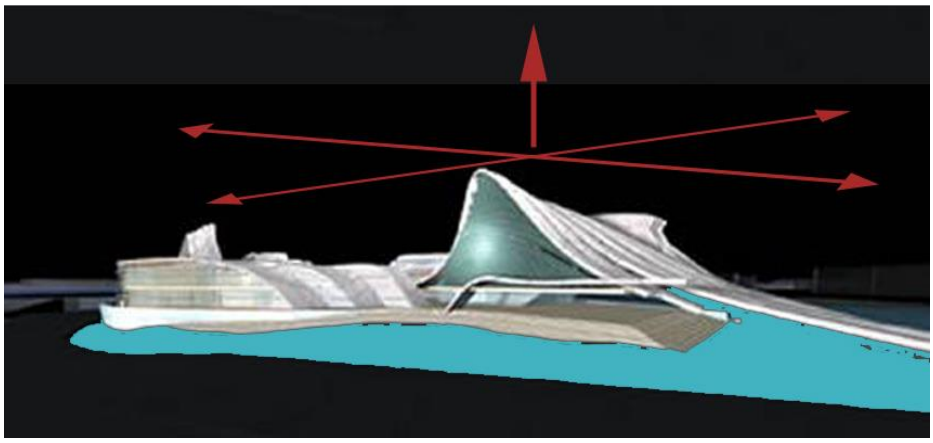

Figure 25. These two axes meet at a point where volumes are created and fractalization occurs.

The handling of the overall design has received special attention in order to guarantee the reflecting quality of enclosure that this brief's cultural and spiritual requirements need. And this is proven by the courtyard's placement, a feature with a long history in Islamic design (Grub, 1078), which clearly delineates the spaces for men's and women's prayers. The visual separation enhances the seclusion between the men's and women's prayers while offering the possibility of more prayer space if necessary. This is an example of how she employed a conventional element to achieve an additional new advantage to the concept.

Her attempt to convey some subliminal messages by emphasizing the value of women's spirituality in Islamic society, a role they have always retained in Islam—by placing the women's prayer room in a separate hall and across from a secondary gallery space.

Water has been successfully incorporated into Zaha's design through the use of channels that float across the ground floor of her plan and create parallel lines with the Quibla wall in the courtyard. Reintroducing water as a key component of Islamic ornamentation and the source of all life (as indicated in the Quran). Hadid is using this feature once more to achieve two additional objectives: first, highlighting the Quibla wall and its liturgical orientation; and second, by utilizing the quiet and discrete expression of water-flow to support a calming and pleasant distraction.

The elegant classic Thuluth Jali script and other Quranic verses are being reinstated as calligraphy in the design scheme as a layer that is part of the internal skin of the prayer hall. Those scripts are considered, chosen, and manually performed by a skilled calligrapher in the old-school style (Grub, 1078). My opinion is that making such an effort to reintroduce a classic element in a cutting-edge frame will contrast and compliment the architectural arrangement. This is an extraordinary talent of Zaha'sThe fact that she chose arches, the main structural component of the building that was also created by Muslims in the early days (see Figure 26), shows that she was aware of the harmony and proportion found in Islamic design. Flowing lines of the arches in that part of the building show a non-traditional style of calligraphy..

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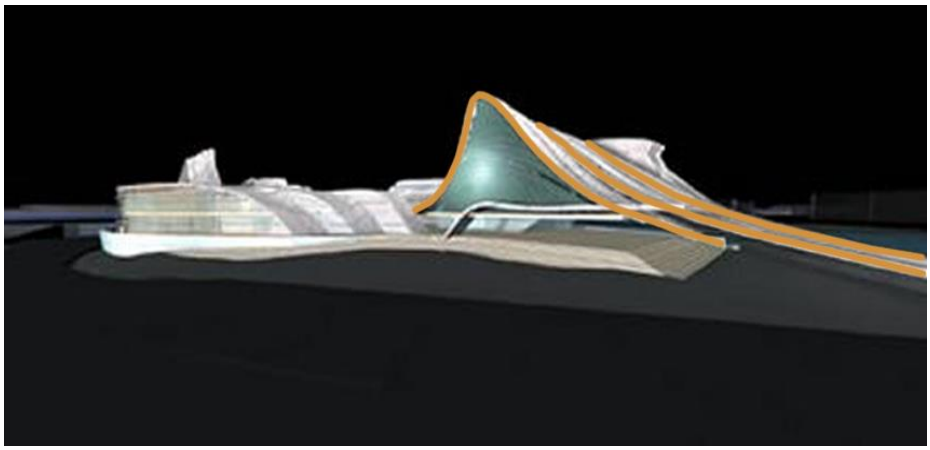

Figure 26. Representing the sense of harmony and proportion By Arches in Islamic architecture

A dizzying array of effects was produced by using the notion of repetition with scale differentiation, which is another aspect of the geometry transformation that Muslims mastered. The arch is utilized to create the striations that form the Quibla wall as well as aesthetic values.

The Islamic geometry is utilized to create a fragmented skin using fractal space, which results in an unexpected combination of light and sound (see Figure 27). (Aaron, 1998). The secondary layer of interleaved concrete paneling, glass, and ceramics is supported by the basic structure of this fractured skin, which takes the shape of reinforced concrete arches.

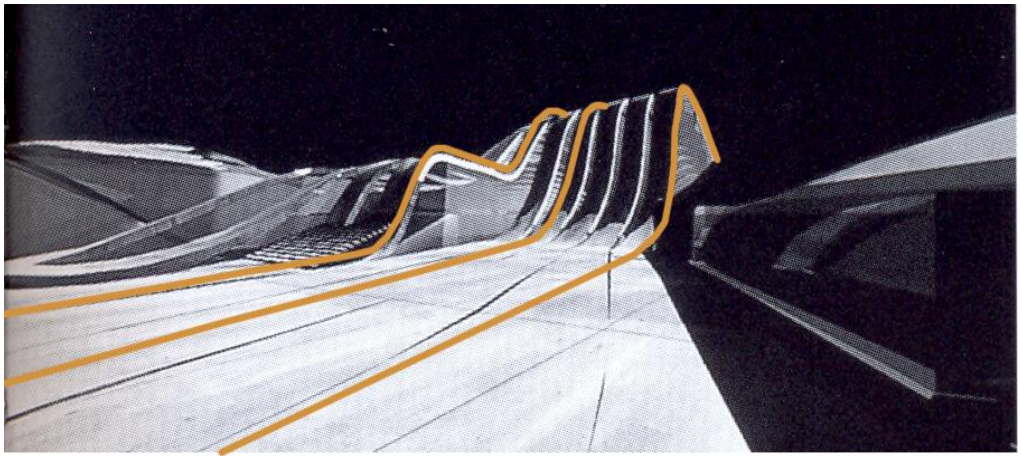

Figure 27. Fragmented skin

The design was split vertically into two halves by Zaha, who placed all the secular functions—including the building's main entrance, auditorium, dining area, and exhibition space—on the bottom floor. In order to separate the mosque and its courtyard from their urban surroundings and create a floating sacred space above the city, they are raised above the surface of the ground. The courtyard, yet again a key component of Islamic architecture, serves as the sole physical link between the building's secular and sacred portions. When the mosque is crowded during Eid or Jumma, in addition to providing light and serving as the only entry from the ground floor, this structure serves as an additional outdoor prayer space.

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The courtyard, which forms a private interior center space enclosed by the walls of the auditorium, the library, and the kindergarten, is the sole Islamic architectural element—aside from the ancient mosque wall—that is employed in this design with its conventional distinguishing features. Light is the final component that is being thoughtfully included into the design by giving it the additional task of coordinating the ascent to the mosque from the ground floor. The mosque's floor slits allow light to fill the secular event below. They attempt to use materials that aim to reflect and refract light and shade in early Islamic construction.

Glossy surfaces were utilized on the walls and floors to optimize the effect. These surfaces grab light, scatter it over the curved materials, and then reflect it back. Zaha accomplished an almost identical feat by inserting lights into the main structural arches to illuminate the Quibla wall. see Figure 28.

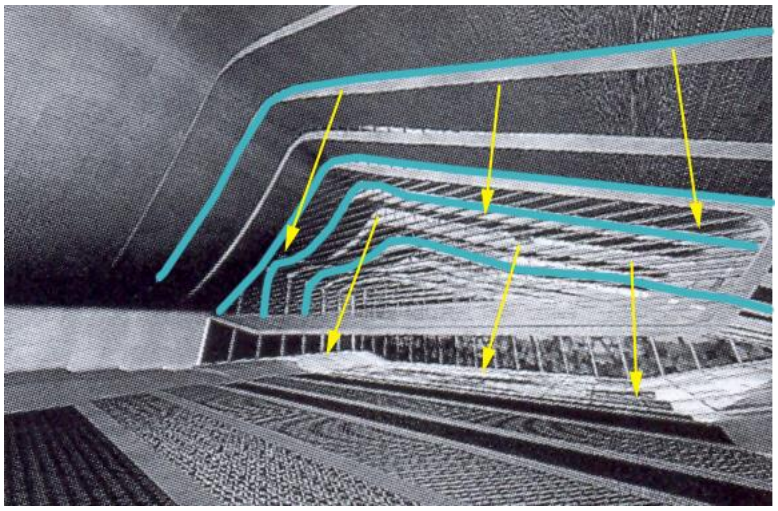

Figure 28.A fantastic combination of sound and light

It is worth mentioning, Zaha did state that the mosque's shape was inspired by manipulating lights and sound patterns or reverberations. However, when I first glance at the form, I imagine an Arabic tent set up in the middle of a sand dune ridge in the Sahara desert.

Conclusion…

Although it is a competition to design a mosque in Strasbourg, France, and despite the very first thought that I had that the building does not reflect the metaphor of a conventional mosque or any Islamic construction, I arrived at a pretty surprising point after thoroughly evaluating the project. It is built in a way that respects the traditional Islamic architectural design principles and also brings back important historical values in an original, unorthodox framework that can be applied to Europe.

The spatial layout and distribution of the mosque's many public areas are carefully separated by the plan. Therefore, its spatial layout is discernible in addition to the building's constituent components.

A celebration of harmony and proportion may be found throughout the composition. It exhibits conventional components that served as a source of reference and inspiration for this design concept, including courtyards, the Quibla wall, water, light, geometry, and calligraphy. The design eventually

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adds fresh ideas as Quibla versus river, fragmented skin, the raised mosque, and the he symphony of light.

6-2 Islamic Architecture elements and features versus the Islamic Art Museum Doha Qatar 1997

Nowadays, the first step in any design analysis is to look at the renders created for the competition. In this instance, the renders lack the typical Middle Eastern domes, arches, or Iwan references, but Zaha Hadid nonetheless presents an intriguing interpretation of the characteristics of spaces in Islamic culture, using her innovative technique. She did not succeed in winning, however it is important to note that she was one of the eight contestants left after 80 responses.

The Qatari monarchs through descent, the al-Thani family, have a long history of amassing artwork, weapons, glassware, coins, books, and manuscripts. The government came up with the concept of an Islamic Art Museum in the nation's capital Doha in order to preserve the collection and make them available to the general public.

Design concept:

The layout of the design is made up of a number of horizontal, sloping planes that act as a field of institutional influence and have a similar shape. It's possible that the repetition of the same pattern with brief moments of variation is an echo of the contours of sand dunes or a "urban graft" that gives the location a second skin. It joins with the earth to form fresh ground, ascends as necessary, and coalesces to form a mass. But in reality, it has its roots in the Islamic preference for a repeated line with a wide range of combinations, which is controlled by mathematical proportion, a domain that Zaha dominate. Here, we see a different way that calligraphy has been used to resolve the geometry of lines in an urban setting and arrange them in a creative matter, see Figure 29.

Here, Zaha teaches us that calligraphy can serve as a kind of identity card for the functions the building has and is not always an inscription reflecting a potent visual sign holding a specific religious message. In place of a cautious building covered with decorative inscription on the exterior, she gives the urban field as a world to explore.

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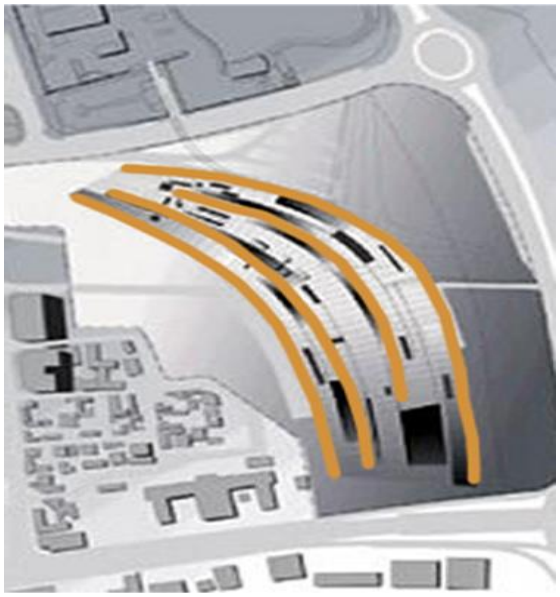

Figure 29. Repetition of the same pattern with brief moments of variation

The project's site was chosen for its size, which was unusually large (nearly two hectares). It is a crucial component of the city, abutting the pedestrian corniche, the harbor to the east, and the national museum to the north. It is encircled by various urban fabrics. The constantly differentiated field of spaces in Zaha's design, which is greatly impacted by the natural circumstances portrayed through weather and geography, can be considered as an example or model of Islamic city masterplans. Or in the stunning adaptation of Islamic architectural ideas, such as courtyards, terraces, small, curved covered streets, and gardens, which are primarily created to cope with the hot climate of Middle East. see Figure 30.

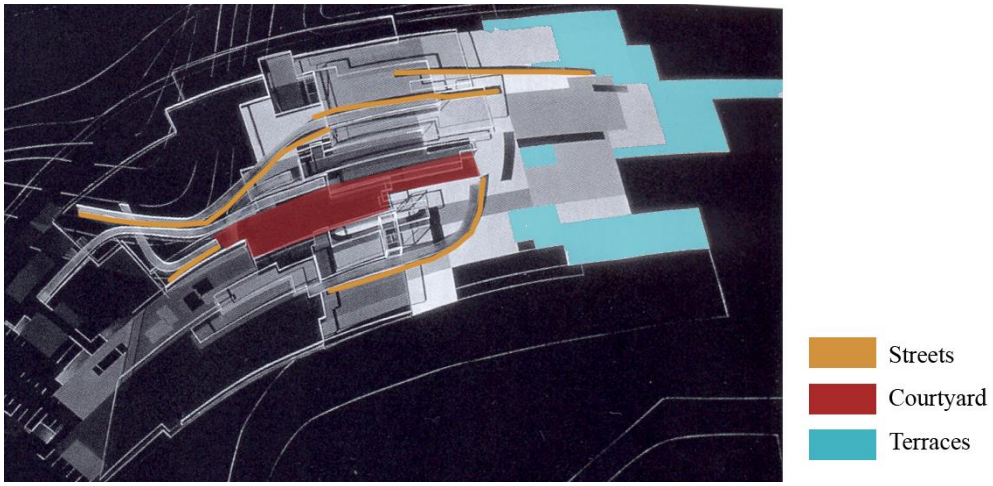

Figure 30. stunning adaptation of Islamic architectural ideas, such as courtyards, terraces, small, curved covered streets.

The Hadid concept attempts to take into account the multiple scales, starting with the areas for Islamic art exhibitions in the north near the state museum, before spreading, differentiating, slicing, and finally fusing into the landscape (see Figure 31). The museum's signature design element is its

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waved roof, which unites two distinct elements of the scheme: the museum's field of spaces, which starts from the north, and the galleries terrace, which starts from the south

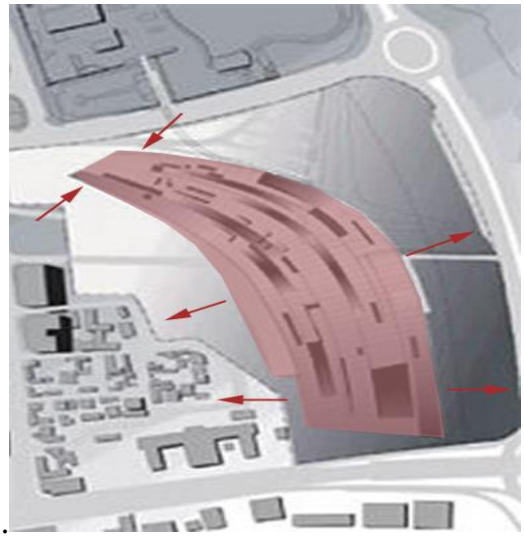

Figure 31. The multiple scales

The classic Islamic courtyard known as al Finas serves as the another component of Islamic architecture incorporated into the building's interior. The suggested project incorporates the courtyard concept to accomplish two objectives: first, to introduce greenery and natural light into the scheme's central area; and second, to forge an extraordinary connection between the interior and the Exterior. The courtyard also establishes the scheme's overall north-south construction pattern. (Binet, 2000).

If you examine at the design from the top, you notice that the plan can expand in practically any orientation, providing for potential future expansion. This lack of direction cues creates an uneven plan that is recognized in Islamic architecture as irregular architecture. To expand the design, simply add more units as additional sloped layouts to the western or eastern of the design, or lengthen the higher or lower end of the waves, see Figure 32.

The design specification clearly mentions this possibility of expansion because the space will need to serve further additional purposes in the future, such as an educational facility that will provide services to Qatari institutions or service areas that will include stores, studios, laboratories, and workshops.

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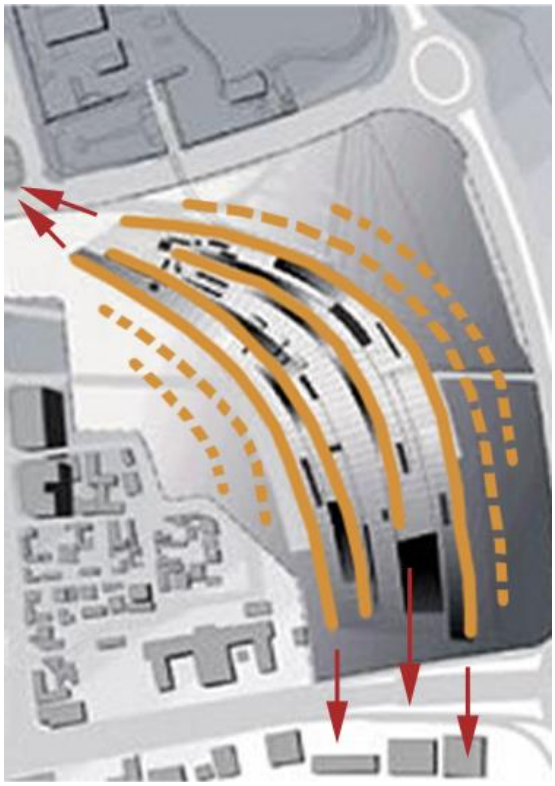

Figure 32. The scheme allows future growth

Gardens are frequently used in early Islamic construction because they create a unique blend of practical and aesthetically pleasing purposes. It is not unexpected that Zaha opted to break up the border between the landscape and building by extending from the Corniche's border to the building's border and afterwards flowing toward the main lobby area in order to integrate the structure to its surroundings.

Quite a mass-vegetation overlaying will soften the boundaries and produce a welcoming, charming entrance. The suggested technique includes a lot of softly textured walkways, vegetation strips, and pavements. By incorporating nature, you can turn the lobby area into a terraced platform scene that extends to the painting galleries at the southern end that face the bay. (Binet, 2000).

Conclusion…

The above proposal, which was picked for this study, differs from the previous one in that it is a suggestion for an Islamic art museum in Doha, Qatar, a Muslim country.

The majority of the scheme's components and elements have been examined, and it is clear that Hadid's creation and the aesthetic principles of her native culture—here, the organic, uninterrupted geometric pattern used to decorate practical objects—have similarities.

One of the most challenging and well documented competitions ever held in the Gulf was the one for the Museum of Islamic Arts in Doha, since it has to function as a cultural resource for the Qatari population, as well as a research center that will draw interest from across the world and awareness from a variety of tourists. Despite the fact that the design did not rank first, I believe it speaks to "the architectural legacy and the contemporary urban fiber" of Doha.

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6-3 Elements and features of Islamic Architecture versus

the sculpture`Abu Dhabi bridge 1997 .

Three bridges are crossing the mainland, which includes Dubai and the international airport, to the island of Abu Dhabi. The first bridge was a steel structure that connected the Persian Gulf's southern shore and is constructed in 1967. The secondary one is created to connect the island's south side, which was developed in the 1970s. A third bridge namely the Sheikh Zayed Bridge, with totally four roads, an safety road for cars, and a walking promenade in both directions, was required to complete the highway system.

This special bridge gives pedestrians accessibility, allowing it to develop into an attraction area on its own and encourage Abu Dhabi's urban expansion.

Design concept:

Zaha's design is unquestionably one with particularly difficult geometry. The sophisticated shape of the steel arches and the solid concrete foundations necessitated the creation of a highly accurate computer model of the bridge in order to predict its behavior, according to project manager Henrik Andersen. Let's start by examining the bridge's size and proportions. It is 842m in length and around 68m wide. The structure's primary steel arch stands 60m above the water's surface and includes a 234m wingspan.

The primary road travels across the bridge 20m above the river. It has been compared to a massive sculpture that snakes through the side roads or a structural string that are fastened within one side of the coast before being raised and thrown over the entire waterway. Looking at the renderings they reveals something deeper; in fact, the brilliant architectural approach for bridging the corner, known as arches or arcades, which is actually its main source of influence. It is utilized in Islamic architecture in a variety of shapes and sizes.

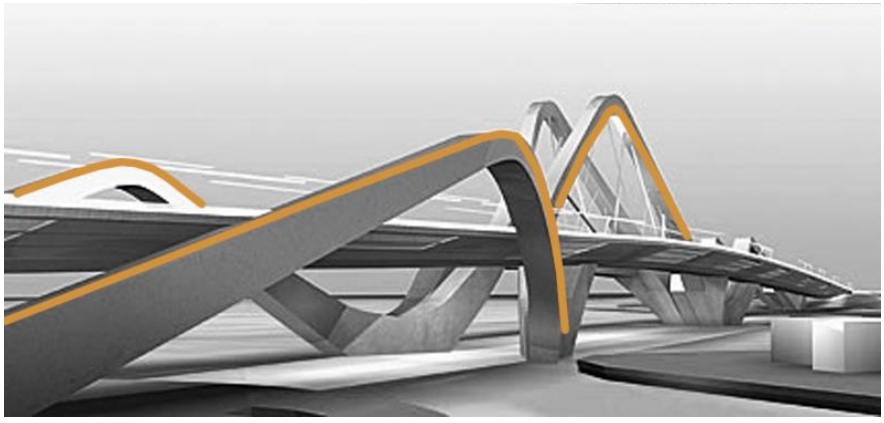

Figure 33. Arches in a larger innovative setting

The Batman Su footbridge crossing the Silvan and Bitlis Streams, which has a major arch that spans 30m and rises 20 m beyond floodplain, is one example of a bridge built using this approach. The Samarra Bridge over through the Harbor River is supported by four massive pointed arches of similar width and elevation, interspersed with smaller arches placed within depressed paneling, as is

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the Isfahan Bridge, which has a carriageway bordered with arcaded niches. I therefore believe that the Islamic architectural vocabulary dominates the structure's architecture, but also includes a number of european and modern components to express a global perspective. (Aaron, 1998).

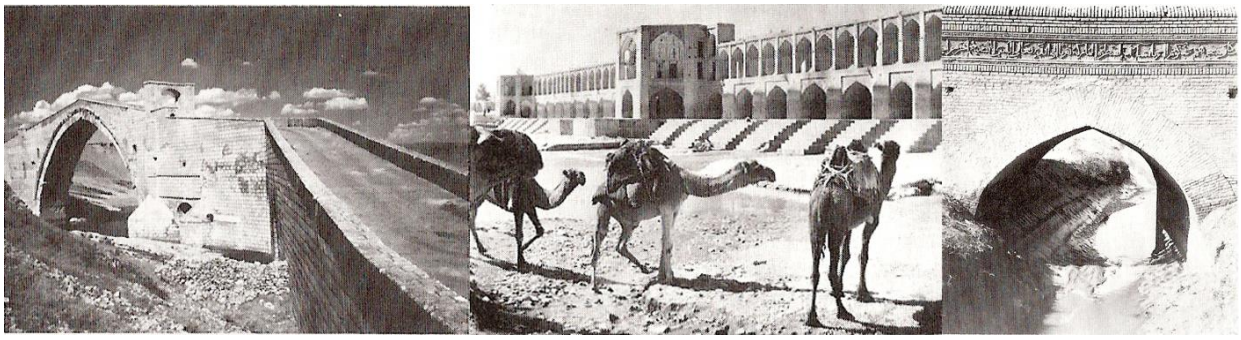

Figure 34. Batman Su Bridge - Isfahan bridge- Samarra Bridge

In addition to giving the bridge a unique appearance, the reason for selecting such intricacy in shape and scale is because a continuous pulse is required to produce the bridge's architectural silhouette. Because the structural strand does not have an evident terminus, the asymmetrical wave of the steel arch points to a plan irregularity that may ultimately force the structural thread to stretch. And there is yet another instance of Hadid appearing to make minimal effort to honor her background. The bridge has extraordinary reinforced concrete and steel dimensions; the middle pillar does have enough cement to cover 5 m deep of football field. (Aaron, 1998).

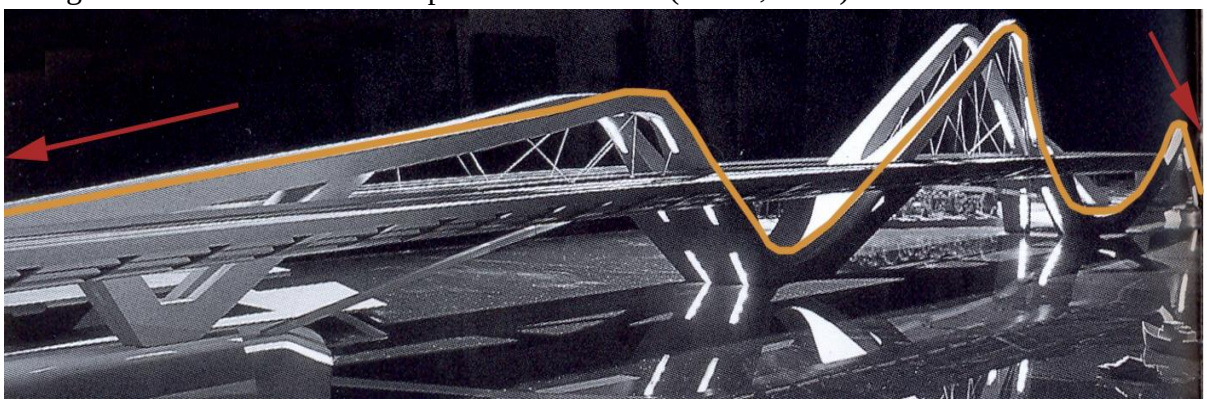

Figure 35. The structural thread can be stretched.

Conclusion…

Since Islamic architecture is prominent in the United Arab of Emirates and since she was known for her addiction to being unexpected and distinctive, the design of the bridge unarguably includes factors of Islamic architecture. She also felt the desire to squeeze the existing limits of bridge design much farther than they had been. In 2006, it was completed.

6-4 Elements and features of Islamic Architecture versus the Department of Islamic Art at Musée du Louvre France.

The most significant treasures of Islamic art in the world are housed at the Musée du Louvre; and over 3,000 artifacts are ready to be displayed to the public in the nearby Decorative Arts gallery. The

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two masterpieces will be combined in a new section of the Islamic art in the Louvre's Cour Visconti, a neoclassical patio. The French are famed for their audacity in fusing modern architecture with ancient structures. And the architecture of I. M. Pei's glass pyramid entry to the Louvre, which astonished the globe, is a superb illustration of their daring. Although Hadid's entry didn't win in the contest, this paper is particularly applicable to her radical and captivating concept.

Design concept:

Even for the protectors of the French heritage, Zaha's initiative was too drastic to win the contest; it has been compared to "a carton milk container that its bottom has been squeezed severely on itself and while the head is cautiously attempting to restore itself". Clearly, the concept goes further such a statement; it claims to give the Neo-Classical court a brand unique appearance. I also have a personal judgment, namely that the concept is an abstraction, contemporary sculpture that can be adapted to practically any desired use, with no consideration given to the surrounding property's architectural style. See the proposal rendering.

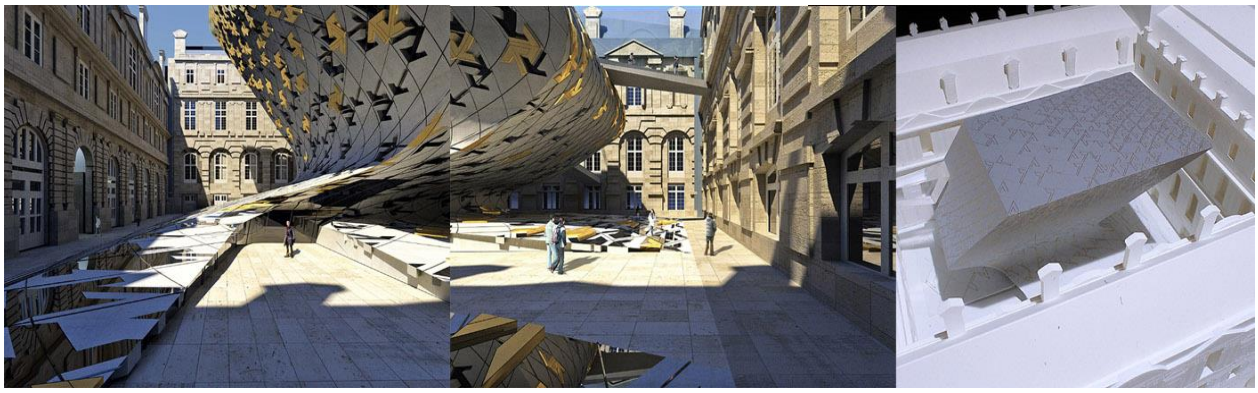

Figure 36

This recalls for Islamic architecture's abstract, perhaps in a broader, bigger context, yet with the same goal of creating a flawless plan that is appropriate for any function or purpose. Anyone can discern from the captivating drawings shown below that the mass does exhibit almost the same layer of complexity from whatever perspective is taken.

Figure 37

Her attempt to apply classic Islamic ornamental techniques in a revolutionary, original manner is the second aspect, which is also fairly clear. She selected a unique style, such as arrowhead, and

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sprayed all over the building in the shape of an aperture. She then utilized the repeated concept singly or in connected couples, occasionally making the repetitions gloomy and somewhat recessed and others prominent and platinum. (Binet, 2000).

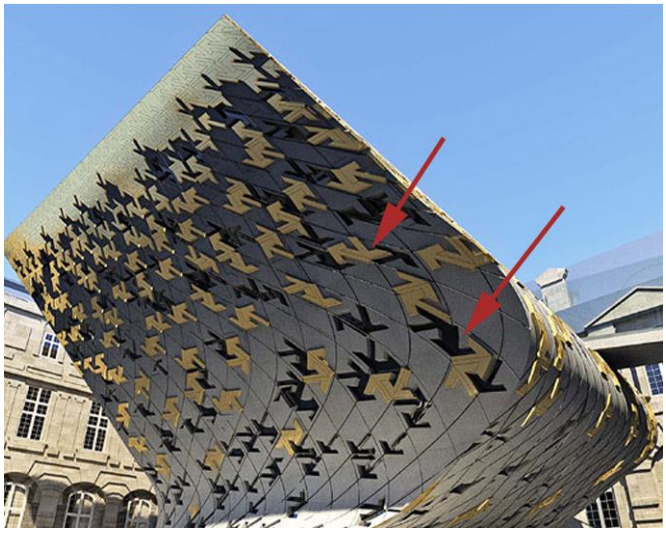

Figure 38

The reason behind choosing to create a metallic exterior accentuated by platinum gleaming glamor's decorating aspects is the final topic of debate. Why we don't observe similar strategy by other contenders? Possibly the only argument is that she has the resources to do , and since she has the experience and knowledge, why not create an egotistical look that is incredibly unique? (Aaron, 1998).

Conclusion…

Once more, in one of the biggest countries in Europe, France, we could see Zaha's design that is strongly associated with an Islamic approach. With this design, the debate over whether to take architectural qualities, regional or universal returns. She did, in my opinion, demonstrate that it can only be regional. Her suggestion would provide Islamic historical cultural influences as an inspiration to western society.

Another significant fact is that we are unable to identify any structure in her design which reflects an image of non-tectonic. This indicates that by establishing a motif that repeats itself across the body, leading to concealing the structural components. The object is simply standing with no sign of support, neglecting, the present of loads on a visible level.

7- General conclusion…

One of the fundamental aspects involved in the creation process is the influence of mythic imagination, that I am convinced in its transformative power. Every architect has a wide range of images stored away in their brain that they instinctively draw from while designing and creating. A great example of this kind of visuals is the architect who imagines a glass tower emerging from the Arabian sand dunes while giving a hundred different justifications except of the actual one, which is an image he has stored in his mind of what could be the epitome city of the next century.

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Most architects have access to the realm of compulsive, legendary imagery, though not all do. Are the architects capable of turning the rubbish of routine construction into something more vibrant by using those images as potent elixirs? Zaha, in my opinion, ought to be one of them. Such iconography can be found abundance in Islamic architecture, which begins with the desert and extends west to Morocco and Spain and east to Yemen and India. The majority of Middle Eastern artists working now in Europe identify as essentially secular people who are interacting with new cultural imagery. However, Zaha Hadid was motivated by Russian constructivism and creates extremely challenging architecture with rather quirky viewpoints.

She never stated that a shape signifies particular thing, and rarely discussed philosophy in her works, which are regarded as the foundation for architecture in the twenty-first century. Therefore, it is difficult to claim that her Muslim upbringing influenced her viewpoint.

yet it comes as no surprise that, after looking at several of her concepts, I came to the conclusion that Zaha Hadid has been somewhat influenced by the splendor of Islamic architecture. She converted the architectural aspects of Islam into a vocabulary that everyone could appreciate. Similar to how she worked with calligraphy and geometry, she converted them into a continuously repeated pattern of strips. She created structures that cannot be understood or recognized fully depends on their physical beauty. She also allowed us to glide across her spaces and offered us the impression that they mutate as we move through them. Her addiction to ambiguity and assumption was undoubtedly inspired by ideas embedded deep within Islamic architectural tradition. Furthermore, I agree that there isn't really just one Islamic or Middle Eastern architecture any more than there is simply one Christian or European architecture.

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