DEFINING THE TIPOLOGY OF ISLAMIC ARCHITECTURE
CASE STUDY: *BAYT AL QUR'AN BUILDING & ISTIQLAL MUSEUM*

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ABSTRACT : The progress of industrial technology allows man to make a several changes and new inventions, including the creation of architectural feats. From the dawn of the civilization, the homo sapiens led a nomadic life and took shelter from the caves or the top of the trees until they settle down and make hut in special places on the earth surface i.e along the river banks, the lowlands and the hill tops. The need to be sheltered from the elements of nature is intensively developed and from here architecture started to advance in enhancing the complexity of building design. The appearance of the new form in the building design sometimes triggers the debate especially the idea of "**concept, technique, function as well as the environmental considerations".** Actually, the new form in building design originated from various basic design principles which emerge from the concepts of the architect. Likewise, Achmad Noe'man one of the famous architects in Indonesia, attempts a new approach in the building design through conceptualizing the true faith of Islam and the motives of Islamic elements in the building designs. *The Bayt Al Quran* and *Istiqlal Museum* are a good example where the architect portrays the significant of Islamic elements and concepts in the buildings. In this paper the author attempt to examine and discuss the buildings that has been designed by the architect and analyze the cases in order to find out how the new 'typology' emerged with his conceptualizing of the Islamic faith in the building where as the prevalent architects develop conventional architecture to match the rapid development which favored the modernist approach. .

Keyword: Islamic architecture, building type and typology

THE DEFINITION OF 'TYPOLOGY'

The definition of 'typology' emerged from the Greek word 'typos', broadly encompassed the meaning and implications to the many nuances such as model, impressions, printed materials and relief. The discourse on typology varies according to the perspectives of discussions. However, a few schools of thoughts focus on the visual images with their view as follows:

a. Guido Francescato

According to Guido Francescato, 'typology' can be interpreted in several meanings. Firstly, 'typology' with its root word **type** is synonym to 'category' while in

architecture and design; 'type' is associated with classification. 'Type' also carries several meanings, sometimes clear while all the time it is rather abstract and ambiguous. The concept of 'typology' also associates with the architectural concept and correlates with the process of making architectural form (praxis), subsequently, the thought leading to an architectural design (theory) and the discourse in architecture (research) continuous. Typology is a study about 'type'; however 'category' correlates with the expression of the building types such as: hospital, library and shopping centre, to name a few. While the technology aspect stressed on the classification of systems to be used in implementing the building, such as: pre-cast concrete, cast in situ, steel or the application of the passive solar.

'Typology' is classified into 2 (two) main concepts:
- 'Typology' is a form of geometry from which the shape of the object is determined, in other word 'typology' is a useful tool for showing the geometry of the building type and this classification is based on the configuration and characteristic of *Ecludean* form (Passanti 1963; Zevi 1948). Likewise, geometrical typology is not unique in architecture because it does not reflect its true nature, however, it is better applied in another art form such as painting and sculpture.
- Relational typology is a vague 'typology' but it symbolizes an architectural form.

To propose a new 'typology', an architect should make a sign or character so that it can contribute to the continuation of history. In the process of establishing a new 'typology' it has to refer to the past 'typology', so that the deviation in the process can be analysed. As a result a new 'typology' emerged. We can use the basic type of the past experiences as a tool so that the 'typology' can help to differentiate and define the origin or the nature of an object.

b. Quatremere de quincy

On the other hand, De Quincy comprehended the typology based on the following definitions:
- Distinguish the differences between a 'typology' and model.
- The recognition of the relationship between object with the historical precedent.
- An emphasis between form and function.
    A 'typology' is also equated with 'model' although they have two clear differences. Firstly a 'typology' presented a fewer images that imitating the idea or element that should be established as a 'model'. Later, the 'model' is understood pragmatically as art; where an object should be imitated as it is. However 'typology' is different, such as an object which is produced by an artist will be different from each other. As a result, Quincy propounded that:
- A 'typology' is not the same as a 'model'
- 'Typology' empathetically is a product of long traditional process (everything must have antecedent).
- A 'typology' can be changed from its origin. In this process, the additional variation can take place in a formal way so that the 'typology' can be modified and developed, especially in the building form or other products.

THE FUNCTION OF 'TYPOLOGY'

1. The objectives of understanding the 'typology' are as follows:
- The desire to analyze and discuss the existing of a product.

- The interest in the design process.

2. **The correlation between the idea of concept, 'typology' and design.**
   A concept is an abstract understanding of an initial ideas, it develops into a process then into the schematic design and later it became a 'typology'. At this stage if it continues it became a design. However, it has the possibility for change which is different from a mediocre 'typology' according to the choice of form, limitation, and characteristic.

3. **The diffence type of 'typology'**
   - As a configuration of urban space and urban complex.
   - Apartment building, include the road system and the relationship with other building unit on site.
   - A level of a housing itself.
   - As a main construction elements.
   - As a decoration element, such as cladding panel.

4. **'Typology' in a process design according to the interpretation of a scientist:**
   - ***Francescato:***
   The application of 'typology' in design encourages an architect to use his ideology, sense, memory, personality and creativity. The creative process in architecture does not show any difference from other aesthetic term in other visual products. The uniqueness takes place in the originality of its architectural work and aesthetic impressions. Architect has a freedom to make a deviation from the various 'typology' which has been established before.
   An architecture masterpiece is usually trying to fulfill the client's desire and wishes so that the new creation emerge with the intention to be different form the one that has been established before.
   - ***Quatremere de Quincy***:
   In the design process, he described the typology as a process of design i.e a shift of creativity which was supported by intuition or as a transformation's sequence and a reduction of function. In other words it is interplay between the establishment of image process and problem solving in a practical way. 'Typology' also establishes the unity of form, function, and meaning which are transmitted by history and transformed through history by dialectical filter between architecture and humankind.

THE ROLE OF 'TYPOLOGY' IN DESIGN CONCEPT

The concept is developed through a reduction of complex experiences process to a logical form of abstraction process. A concept can be a framework for the design. The mental image enriched the architect to make a subsequent involvement subjectively. The arrangement of the logical form to the actual experiences is an interpretation process, which sought the compatible form for the certain concept.

Typology is useful for the arrangement of the complexity of memory so that it can function as a basis for the next possibilities of design. Typology also prepares a framework for identification of several places and different event in the cognitive experiences. The existence of innovation came from the analogical thought and metaphoric design process.

Imagination in our mind is determined by the experiences of our five senses. The experiences also influenced the interest and emotion of the designer. However, the ability to choose the experience through the mental imagination is needed by architects. Aldo Rossi described that the past experiences has taken place in a memory and is

waiting to be used as framework for the design in any moments. Thus, memory is saved in the 'typology' which is compiled in the mind's catalogue.

THE CONCEPT OF ISLAMIC ARCHITECTURE

Islam originated in the Middle East, hence, it is our impression that every building form and design from Middle East is identical with Islam. However, the *syariah* and *aqidah* does not change among the Moslem around the world, regardless where do come from. For an example, the architecture of the mosque is not necessarily reflect Arabic architecture where as the architecture of the mosque should be universal. All the countries that had been conquered by Islam has established the richness of Islamic architectural form and typology. However, the building technique, architectural style, elements, and details are different among the nation, although they share the same faith.

Islam respected the advancement of technology as well as modernism, because Islam teaches the prohibition of *taqlid* (following the tradition without understanding the knowledge/science). This statement is evidently portrays in architecture where the architect must be *ijtihad*; the thinking order and form language according to Islamic way. Achmad Noe'man (1981) explained this in relation to *Surah Al Baqarah :170*:

"Dan apabila dikatakan kepada mereka : "Ikutilah apa yang telah diturunkan Allah", mereka menjawab : "tidak, tetapi kami hanya mengikuti apa yang telah kami dapati dari nenek moyang kami ", apakah mereka akan mengikuti juga, walaupun nenek moyang mereka itu tidak mengetahui suatu apapun, dan tidak mendapat petunjuk."

The meaning is roughly translated as follows: " …*people is prohibited to follow the tradition that may be misleading"*. Generally, an architect may not make any innovation in his design if it appears undistinguished. Whilst Noe'man refers to the quotation from *Surah Al- Imran: 190-191* which explained the obligation to explore the universe.

Adhi Moersid (1992) argues that: 'Islamic architecture has to be a stimulus for every Moslem so that his relationship with the space he inhibits led him to realize the greatness of the creator (Al-mighty).' However Noe'man in the same writings argues that "…it is possible for Islam to develop well in one area but the Islamic architecture did not develop instead"… Noe'man (1981) added that this is due to our reluctant to accept and develop the criteria of Islamic architecture as opposed to what has happen to the Bauhaus despite the Bauhaus design prohibited the application of ornament and perhaps anti-eclectics is a real concept of Islam. Bauhaus always make a modest concept in their design and is honest to nature.

In Islam the guidance through *Sunnah and Ayat* are two good examples to dignify the the true concept of religion. Firstly the *ayat-ayat* in Al Quran described the absolute existence and contain the laws - *syariah.* Secondly the *ayat-ayat Kauniyah* in *Sunnatullah* covers law related to nature. Allah commanding the people to explore and exploit nature for the benefit of man without damaging it.

Noe'man (1991) later added that the discussion about mosque cannot be isolated from the main issue of *din* in Islam, which arranged the way of life and the moral of the Moslem. In designing a mosque, architect must have a good *taqwa,* and then in the programming process should refer to the Al Quran, *Al Hadist and Sunnatullah*. On the other hand, Darrundono (1991) points that the architecture of a mosque should not

be *"Arabsentric"*. The main intention is the guidance that must be appeared from the 'soul' of Islam itself. He did not agree if only the cosmetic is only Islamic especially the physical visualization of the building instead its soul must be Islamic too. The soul of Islam can be interpreted various forms as long as it did not contradictive with the Al Quran and Al Hadist.

THE MEMORY OF ISLAMIC CONCEPT IN BAYT AL QURAN BUILDING AND MUSEUM ISTIQLAL

Bayt Al Quran Building and Museum Istiqlal are two buildings in one unity. Of course as discussed earlier that the design process cannot be separated from the Islamic value which refers to Al Quran, Al Hadist, the daily life, the moral and culture. Instead Noe'man beholds that Islam did not have a dichotomy between religion and *muamalat*. He stressed that Islamic concept is not only found in the ritual activity but also in the ideology, intellectuality as well as social.

Although Bayt Al Quran and Museum Istiqlal shows the unity of design, however, Bayt Al Quran is not a museum, and Noe'man contested that Al Quran itself cannot be considered as a museum. This is because literally Al Quran contains a high value which is useful for humankind, and through *taqwa* Moslem can reach the highest level in Islam to be a *Muttaqien*. The existence of Bayt Al Quran as a building as intended by the architect with respect to Islam as a living concepts should be emulated in the daily human life. The rite of passage of the Moslem and daily activities can be seen in Museum Istiqlal, i.e. circumcision *(berkhatan)*, *khatam Al Quran,* wedding ceremony, etc. In other words Bayt Al Quran as a source and Museum Istiqlal is an implementation in Islamic culture.

Bayt Al Quran is not a place to deposit Al Quran but it function as a place for study about Al Quran. The study about Al Quran can be divided into textual study and contextual study where textual discusses on translation and application of *ayat-ayat* Al Quran, while contextual discusses about application of *ayat-ayat* Al Quran in daily life.

Picture 1.
Exterior of Bayt Al Qur'an, it obviates excessive impression

Picture 2.
One of courtyard facade of
Bayt Al Qur'an

Picture 3.
Landscape and gardens play an
important role as a place to relax
and educational for visitors

From an architectural point of view, both building have a high value in Islam belief, such as the prohibition of (wastage) *mubazir*, but it shows the equilibrium between aesthetic, function and the security. The exterior of the building is illustrated with calligraphy from *ayat* Al Quran. The *ayat* became decorative elements and is compatible with the concept of the building.

The transformation of the roof from Demak Mosque on one side of the building is applied here as a basis to serve the function below it. Here the location of the conference room is placed. The height of the roof enables a high profile ceiling. There is no doubt that the Demak Mosque roof form is the best choice for this design references. Museum Istiqlal consists of every cultural artifacts of Islam from the past with its basis from Al Quran. Generally, in term of its function, the room's arrangement is just like any other museum building.

Hence, Bayt Al Quran and Museum Istiqlal are the masterpiece of architecture the Indonesian's effort to offer to the Moslem in understanding the meaning of Al Quran. Obviously, Islam is a religion of peace and tolerance.

CONCLUSION

Noe'man shared his experiences in the designing of Bayt Al Quran and Museum Istiqlal where he advised the architect to discuss the needs, and understand the true intention of the client in depth if he never involve in any project that really stress on the concepts as a true approach in the design process. Although the imagination of an architect can be translated into the physical form through sketches or other means of physical media, creativity is a long process which involved experience and understanding of the true nature of the problems. The imagination is emerged from the memory and experiences and this will appear in the future design. Mental image will enhance the designer ability in the concepts making. According to Noe'man, in discussing the Islamic architecture it is better to focus on the direct Islamic concepts that will encompass the understanding of architecture as a holistic venue. This is true that if Islamic architecture were to be achieved by the architect he has to delve into the concepts thoroughly in order to produce good architecture. This process can be an outset and develop at any typology and location regardless of the situation or culture but he or she needs to understand the Islamic faith immensely .

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