THE RELATION BETWEEN HUMAN AND NATURE IN TRADITIONAL HOUSING OF JAPANESE AND NUBIAN CULTURE

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Abstract— This paper aims at studying both the Japanese and the Nubian design cultures, being a completely different approach from other cultures. The study is done through clarifying the relationship between human, nature and their relation to religion and culture. In addition to how that is reflected in designing their houses.

Index Terms— Traditional housing, Human and nature, Japanese culture, Nubian culture, Buddhism religion, Islam religion, Sustainable design, Aesthetic, Internal Architecture, Deities.

1 Introduction

Claimed that the Japanese have a particular love for nature, nature, it is often reflected in their art and culture which is related to the concept of Buddhism religion and their daily life, as well as the concepts of aesthetics and architectural designs.

All things have a value and a meaning, and that is noted in their sensitivity of appreciation and respect for nature and religion. In order to understand the depths of Japanese religion and its relationship with the houses and the surrounding environment, "it is important to understand that the people of Japan saw themselves as living in a kind of blood relationship with the gods, who embody natural energies, according to a theory of Tetsuro" (Nitschke, 2002), so they seek to link aesthetics science, art, and everyday life with nature. Also they had a belief that when four pieces of wood are rapped with a rope around them in the garden, this would bring deities. In the same manner, the house is composed of four wooden columns at each corner with a roof, this makes it a place of worship and devotion and create a rustic mountain atmosphere. Likewise the Nubian houses are a strongly linked with nature, the traditions and the customs of the three religions (Judaism, Christianity and Islam), which significantly contribute to their design. Desert conditions are tough and dry specifically in Almahas region, which is located between Egypt and Sudan, so the Nubian house that deals with the psychological and spiritual aspects of design is really extraordinary. Both of the two cultures tried to integrate nature and architecture to build the houses, each according to their religions and beliefs, to make it like a paradise on earth and to connect it with the spiritual world to create harmony between the house and the surrounding nature, and that involves the extension of ethics to include the relationship between human and earth.

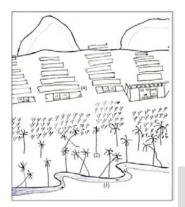
2 HUMAN AND NATURE IN JAPANESE AND NUBIAN TRADITIONAL HOUSE:

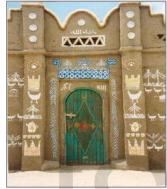
Known that the traditional Japanese houses have a small size like the tea house (Tea Ceremony) which consists of several spaces, everything is designed according to the nature, and the religious and cultural beliefs. Those houses are usually built from natural materials such as stone, clay, and wood. This indicates a deep-seated preference in the Japanese side for living and transitory, for the change of the seasons, linking the relationship between spaces, such as the relationship between the house and the surrounding nature. Some houses used a bridge or stairs to reach them, it expresses the nature and human, just like the relationship of earth and sky (Nitschke, 2002). Despite their small size, the Japanese used some techniques in the design to give the place bigger size, as well as flexibility. Such as the use of high ceilings and creating a depth to feel emptiness and time by providing three conditions:

- 1. Free-flexible space.
- 2. Seamless between exterior and interior.
- 3. Usurious.

The Nubian houses which are propinquity in design are along the shores of the river, are distributed in a horizontal line from the bottom near of the Nile river to the top of the direction of the mountains, as shown in figure 2.1. That is in the general shape actually more like a castle. Their high walls are almost devoid of windows, only a small triangular openings at the top of the walls. Furthermore, the high columns of mud in the corners of the house enhance the feeling of a castle, as seen in figure 2.2. This architecture processors are full of meaning and address the societal and psychological requirements very intelligently, "Castle form reflects strongly on the concept of the extended family as a distinct independent stand-alone" (Amal Omar, 2006). Moreover, the doors and entrances of these houses are often in the direction of north or south, to be facing the Nile River, and

this direction of the house with exterior conquests expresses all the acumen and statesmanship, as they had a firm belief that angels live in the river "the Nile", so it was logical to direct the gates of the houses to receive those angels and to be far away from the sun. As for the Japanese culture, the sense and participation and contact with nature in their worship is done by using sliding doors and large windows, which are covered by type of papers. Also using animated curtains, which allow the entry of wind, sunlight, and sounds. In addition to the possibility of being agitated simply according to the time and the season of the year. They also create a stronger relationship between the garden and the house, as well as creating a painting inside the house through the windows and doors, as is the case in the non-use plus furniture about the need to give the spatial perception and visual and participation of all times





of nature to the inner parts of

the house (Nitschke, 2002). These windows and doors directed towards the north and it is not rational climatic reasons, but its religious significance which is they believed that "Deity is the Son of sky and lives in the north of the earth like the North Star in the sky and he looks to south to his subjects" (Nitschke, 2002).

Fig 2.1. Spread The Nubian Houses Around The River (Omar, 2006).

Fig 2.2. The High Walls Of Nubian Houses (El-Hakim, 1993).

Designers are committed to a sustainable design during using eco-friendly materials, and in this attempt to estimate and respect each object in the nature, so Japanese culture integrate some strategies in their designs in an attempt to take advantage of nature. For example, the house is raised on columns of wood to create a distance between the earth and the house (Nitschke, 2002), as a result creates a sustainable house that can resist the climatic conditions at the same moment which it feels and tastes the nature by:

- 1. Creating wind under the house and thus a natural cooling of the house
- 2. Alleviation the soil moisture under the house.
- 3. Preservation of air disasters.

In addition to using some stalks of the plants in the construction of the ceiling of houses, such as bamboo and rice, which are light weight and hollow from the inside. Thus, forming a thermal insulator and preventing wind and rain. The flooring mat "Tatami" is made up from natural trees and plants that is easily cleaned and draped, to create an aesthetic artistic modality that is integrated with magnificence of nature

(Nitschke, 2002). Those aesthetic activities aimed to strengthening the existing properties in natural materials and the respect for others, a value not only for the aesthetic sense, but also to develop an ethical perspective, which is needed to formulate a right relationship with nature. On the other hand, the most important secret of the greatness of traditional Nubian houses which is the houses phenomenon compact solutions that are responsive to number of basic requirements into the context of a single solution. For example, the form of its plan which called model saucer (El-Hakim, 1993), some of the high-rise rooms with interior depth are wrapped around a courtyard or open space, which in turn increases the intimacy between family members. Also, in terms of climate it is the perfect solution for hot and dry areas, as it provides some permanent shade in-room, as well as wind and good ventilation. That is because it allows the movement of a wide passage of air, addition to the absence of large windows overlooking the outside and use the Bishop of twigs plants, serving more than one purpose and softens the impact of the internal temperature, as well as protecting the household from the evils of the evil eye as they believe, and to feel the emptiness. As for the depth of the rooms, it creates warmth in the case of low temperatures. It is of the Nubian tradition that if the cold intensified, the mothers would bury their children, except their heads, in the ground so that kids feel warmer (Omar, 2006).

Japanese culture has seen things of Chinese culture, like modern dedicated porcelain and tea-making, as well as natural incense vases especially with landscapes painted by ink, which have a small size with comments, photos, and paintings containing writing and seasonal flowers, which can be simply transported and changed according to the visitors and seasons of the year (Nitschke, 2002), to develop a new type of internal architecture and its relationship to the respect and appreciation for nature and natural perspectives. Also in Japanese architecture attempt to achieve ratios aesthetic to all parts of the house, the dimensions of columns, wooden prefabricated components, and the mat system, all are designed carefully with each other. It can be difficult for untrained eye to note the differences, but the system here does not mean perfection because it is based on a literal work of natural materials with each other. Moreover, contradiction and dialectic in designing the room like coarse soft ground and walls, in turn simulates the spatial perception and visual for the texture as beauty of the contradiction. Similarly, in the Nubian engineering culture the exterior and interior walls are always decorated by women through painting, sculpturing, forming and coloring, they had inherited from their ancestors as geometric shapes dominated by the religious character of the Nubian civilization, like curved and complex lines symbolize the palm leaf, Nile river or strong animals such as alligators, lions, birds of prey, and the crescent and the cross, or some white circles symbolizing the sun. Likewise, in many of the entrances paints a Chinese white tea dishes are stacked according to the geometric shape that adorns the entrance. "And believed that these geometric shapes protect against witchcraft and envy" (Omar, 2006), to make sure of the attention span of Nubian architecture and its



affiliation to religion and nature. Also, to suit their circumstances and environment pressing to be their homes as they enter tranquility and peace in their hearts. These methods of recruiting this art to show the concept limit exceeded visual sensory gratification by touches and address the psychological sensations also expand upon the spiritual worlds.

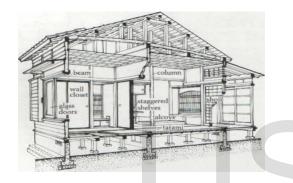


Fig 2.3. The Inside Of the Traditional Japanese Homes (Baek, 2013).

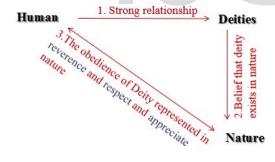


Fig 2.4. Lift Japanese Houses on Wood (Baek, 2013).

As for the Japanese houses' gardens has been a part of the architecture and intervention within religious beliefs in the design of some of its parts. For example, the central gate is in the form of the window that is difficult to use and requires bending to pass which in turn represents the respect and appreciation for nature and the owners of the house. Also, the garden's path is designed by stones that are irregular and varying spaces to be as a mountainous, and slow down the visitors' walking to take a look at all the garden, also to savor the nature and sense it from inside them, as every scenery in the path invites visitors to progress more and more (Saito, 2007), As if to express the past, present and invites for the future, to lead us out of the daily experiences and tribulations

to the peace and solitude with nature. Likewise, each Nubian house has an external door in the fence, and an inner door made of animal skins or palm fronds, that is for their quest to link the internal and external relationship and participate nature. As for the ground of the garden, it is made from the surrounding environment such as mixing mud and dung of donkeys to produce a coherent mix (Fouad & Moustafa, 2015). Also, the use of natural materials in the outer garden to preserve the natural characteristics of the place and respect for nature as well as the sensing sensuous of it by guests before entering the house.

3 CONCLUSION:

Architecture is the language of the ideas which is expressed by the models to produce a harmony between human beings and nature, Japanese culture tried to promote this harmony between nature and human, that by linking nature with deities and their houses, as they believe that deities are everywhere in nature, so it was makes sense to link nature with traditional houses to become a place of worship and obedience. As well as the Nubian culture adopted nature and the environment around them in the design of their traditional houses and use some of the design techniques to connect with nature and the spiritual world. As the result is that both of the two cultures in a strong relationship with deities, which are found in nature, so it creates respect and appreciation and reverence for nature, therefore the nature represent a religious aspect enters within their daily life such as design houses to make them as if paradise on the earth, Figure 3.1.



Fig 3.1. The Relation Between Human And nature And Houses Design in the Japanese and Nubian Culture (Drawing By The Author)

Targeted this paper the Nubian and Japanese culture, because they are different in a lot of cases of the other cultures, in terms of the relationship between human and nature and deity, and how this is reflected in the design of their traditional houses by using some of the methods and techniques that ensure the strengthening of the relationship of human with nature and benefit from it according to each of their beliefs and religion.

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