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Assessment Of Courtyards In Classical And Medieval Architecture, Its Relevance To Modern Day Architecture

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ABSTRACT

The work underscored the relevance of medieval and classic architecture in modern day design, architectural elements, and structures, commutating in the classic, dynamic and operational design observed in modern day architecture. The rooms of courtyard dwellings in both the ancient civilization of African, Asia and Arab world provided foundation for designs of courtyard in modern architecture. It therefore concluded that medieval and classic architecture provided a significant foundation for the rise and continuity of modern architecture especially in courtyards.

Keywords: *Courtyards, medieval architecture, classical architecture.*

INTRODUCTION

Evolution of courtyard form

Courtyard housing is known as the oldest form of residence. The historical evolution of courtyard configuration across the world showed in ancient civilization excavated at Kahun in Egypt, which date back to 5000 years old to the Chaldean City of Ur before 2000 B.C (Oliver, 2003). The characteristics of courtyard housing depend on the environment and the culture of a group of the specific region; for an example, courtyard may serve as an inner garden, or may function as the focal point in the house. Through thousands of years different planning of courtyard housing was demonstrated, Sumer and Pharaonic Egypt recorded as the oldest culture of the Middle East, which hold the oldest example of the courtyard (Ayhan & Neslihan, 2011).

At 700B.C, in Italy a new courtyard design, which refer as atrium house, was developed from the old form, the purpose of this type is to provide private outdoor space. While, atrium house met up with the Greek pre-style. The atrium design showed small courtyard enclosed by columns (Das, 2006). On the other hand, in the Middle East courtyard house is an architecture tool, that are common in hot and dry climates, it was held in many ancient cities and attempts to generate private area for introversion *(Al-Azzawi, 1994)*

Ancient Civilization

From North of Africa particularly in Southern Tunisia a troglodyte village in Matmatas can be traced to present ancient form of courtyards, it was the most primeval society, which built houses with courtyard Taleghani, Tepierila, Dobbelsteen, (2012) noted that the first prototype of the courtyard introduced in many regions in South, West and North Africa, also in Morocco is traceable in them. Figure 1 shows the different types of the courtyard plans in Africa.

Another example that reveals in the archeological survey found at Ur on the Euphrates River in Mesopotamia in 2000 B. C as shown in figure 2, the plan showed a square courtyard that are surrounded by rooms on the ground floor, and the second floor of the house is open to the Courtyard (AI-Dawoud, 2008). In China, primary houses have significantly influenced by religion and the philosophy of Yin and

Yan; moreover, the courtyard used for privacy and meditation (Das. 2006). Even the form had another attribute from the first example of UK instead of surrounded by rooms, the Chinese courtyard surrounded *by* an individual, which belong to different people. Garden and water features were two signs for the courtyard, thus they are used as a cooling tool in a warm climate in the Southern area (Bridsom 2012). Figure 3 illustrates the typical layout of Chinese dwelling and courtyard houses, while, Figure 4 presents the typical layout of the Japanese traditional house.

Another religion philosophy of courtyard house found in Islamic civilization, the court area used normally by family members, the courtyard have been surrounded by the house itself or high wall and is an "open to sky" area that used as living extension area for the house members. Most of the time, guest is welcome to use this area but with separation genders, the courtyard area, of Islamic house is organized well to ensure no mix between genders (Edwards, 2006), Figure 5 illustrates traditional courtyard with street view of courtyard with high level wall.

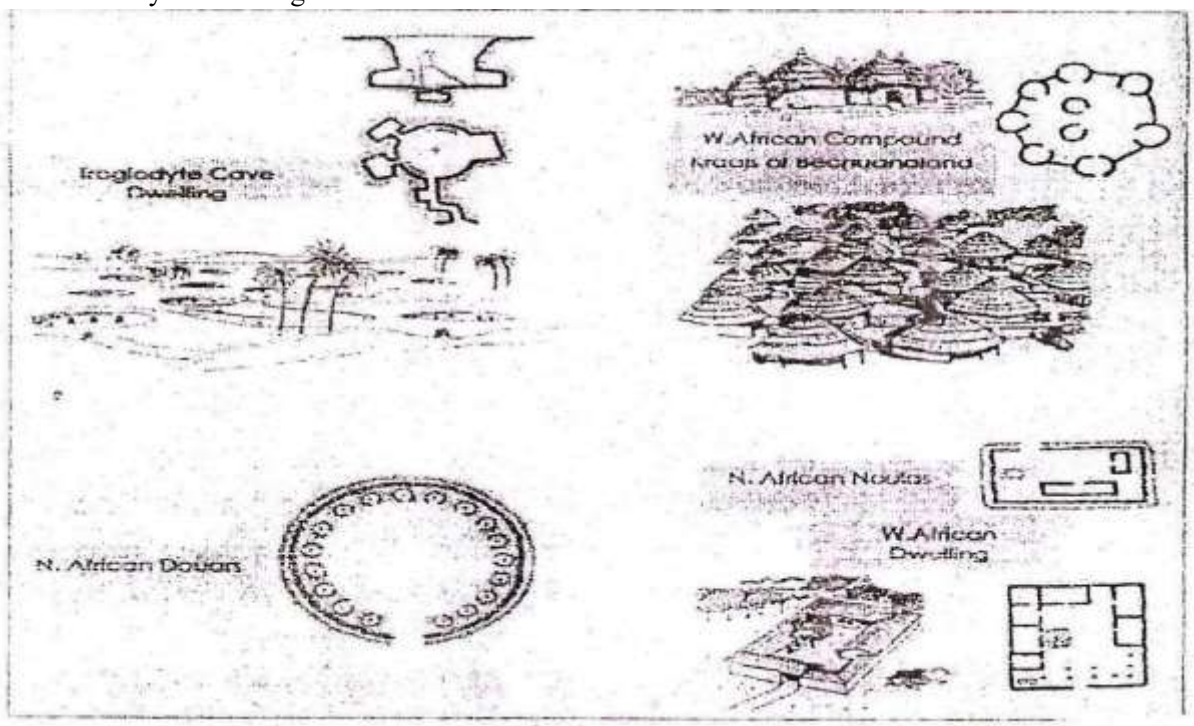


Fig. 1: Different types of courtyard plans in Africa (Schoenauer & Seeman, 1962).

1- Entrance
2- Staircase
3- Washfoom
4- Kitchen
5- Storeroom
6- Courtyard

Fig. 2: Plan of house at Ur, Mesopotamia (Al-Dawoud,2006).

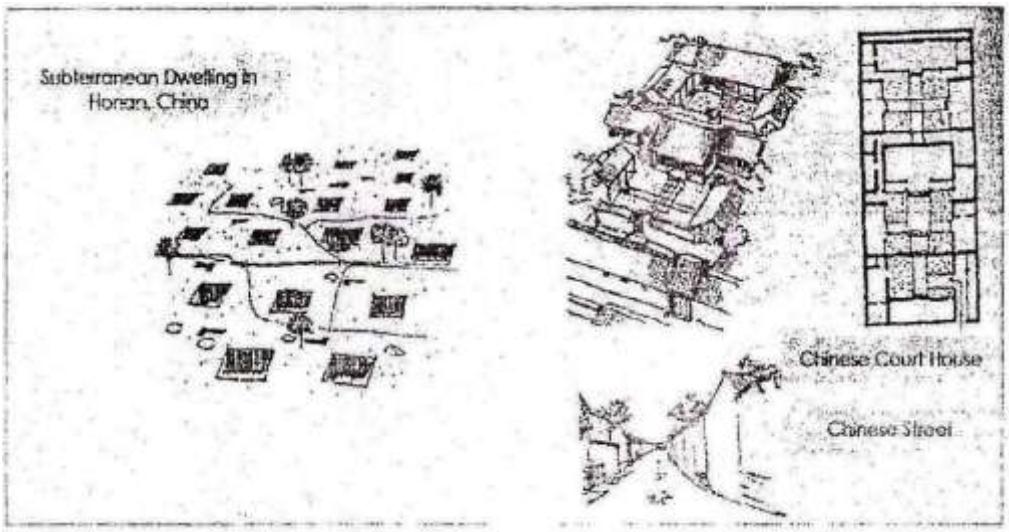
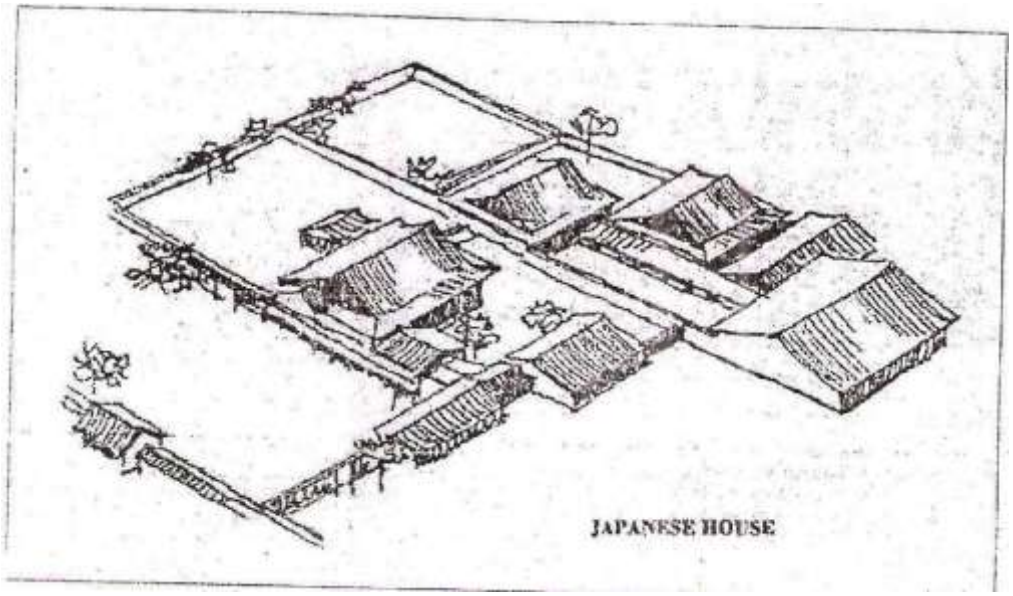


Fig. 3: Typical layout of Chinese Courtyard houses and street (Schoenauer & Seeman, 1962)

Figure 4. Typical layout of Japanese traditional house (Sclioenauer & Seeman, 1962)



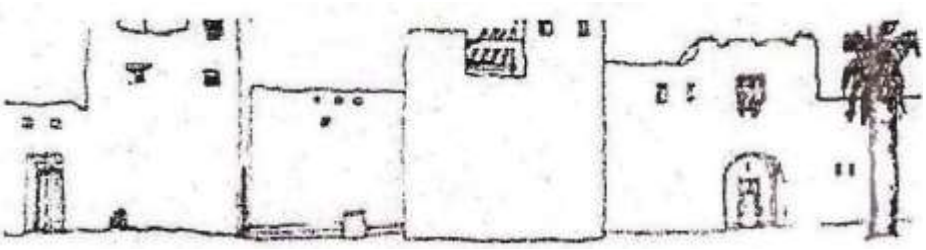


Fig. 5: Street view of Islamic Traditional house (Edwards, 2006)

Classical civilization

In Italy, the development of the courtyards took another kind of design in 700 B.C it was named as the atrium house. The atrium house design had a small courtyard surrounded by rooms, with a container in the center of the courtyard to gather rainwater to drink. The main purpose of this design, which is open to the sky is to provide a private outdoor space. Another era of the courtyard house appeared around 275 B.C. when the Roman architecture became a mix feature, which was inherited from the Etruscans and the Greek after Southern Italy was occupied by Romans (Al-Dawoud. 2006).

Furthermore, the atrium house was Greek peristyte (court enclosed two columns), which started when people began to build a big (atrium and peristyte). Any one of these styles had their location in design, atrium near to street and peristyte in the back of the house, figure 13 presents both classical era of the courtyard house and atrium.

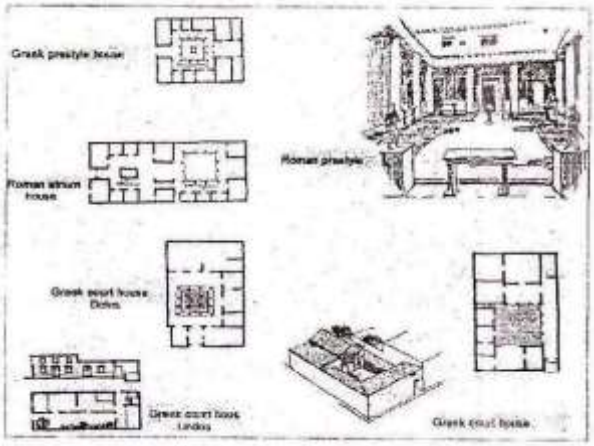


Fig. 6: Typical courtyard dwellings during classical civilization (Schoenauer & Seeman. 2002).

The Middle Ages and Renaissance civilizations

Das (2006) emphasized that after the fail of Roman Empire by 476. The courtyard type dwelling suffered relapses but found in Italian Cortile and monastic cloisters. During Christian architecture era, the atrium style became familiar in early churches which it used as meeting place, in the center of the colonnaded open court, there was a fountain or well that was used by worshipers to wash their hands before entering the church. In some Islamic countries like, The Middle and East North Africa, a courtyard house or which known as "Dar" follows the philosophy "privacy and seclusion with a minimal display or the occupant's social status to the outside world" (Das, 2006). Private courtyard offers isolated space for women to relax with sheltered courtyard trees, a pool, and outdoor furniture. Another element of the design of courtyard

(serdab) appeared in Mesopotamian region. Figure 7 shows courtyard house design in Morocco and Baghdad at that era (Das, 2006). According to Das, there are two courtyards in northern area around the Mediterranean Sea, particularly in Spain, that influenced the Roman atrium, the design the courtyard in the north of Spain is more solid than the Southern, which used the court for more outdoor activities that help the evolution of the courtyards dwelling type.

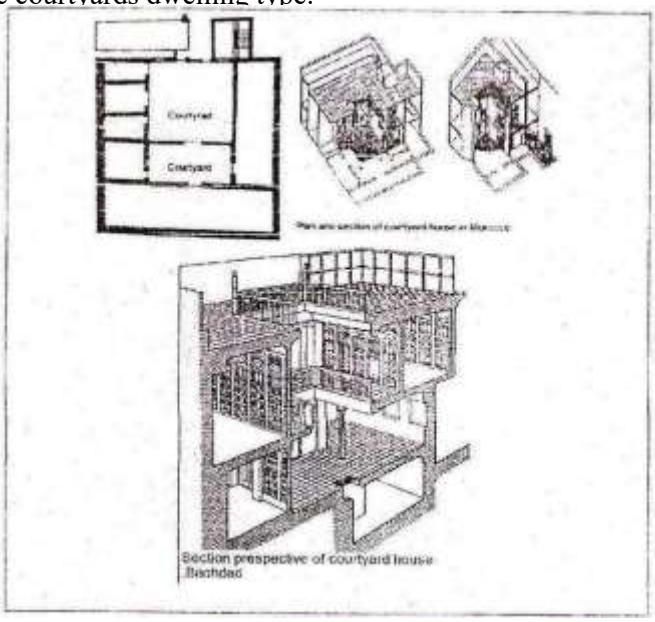


Fig. 7: courtyard houses in Morocco and Baghad during middle ages. (Bloom. 2009; Edwards, 2006)

Modern Civilization

In Europe, Stefanos, Rogers and James (1996) observed that the single storey courtyard houses became widespread. This type of house design was requested by low-income class and it was built in the South by Hugo Haring in 1929 (Jones, 1999). The design of the house like today mobile house with thin and narrow structure became modified in 1931 to L-shape by Hilberseimer who recreate new design that separates living room from bedrooms" area, which became popular in England and Germany until late 1960s. Figure 8 presents L shape courtyard house designed by Haring and the new design by Hilberseirner (Morton, 1992).

In United States, the courtyard entered to the West Coast of North America and prevailed in the Southern California due to the influence of Spanish colonial masters, whereas another opinion mentioned that, the different building's style of Los Angles was influenced by the movie set and film industry. Stefanos *et al.* 1996). Observed that the tourists who settled down in California between 1880 and 1930 created need for high accommodation that, changed the form of courtyard houses in that region. During 1920s building designer included the several architectural elements of classical era of French and Italian renaissance besides vernacular form of rural Spain to develop new courtyard house (Polyzoides, Sherwood & Tile 1992). Figure 9 illustrates courtyard house in Los Angles in 1928 and 1929.

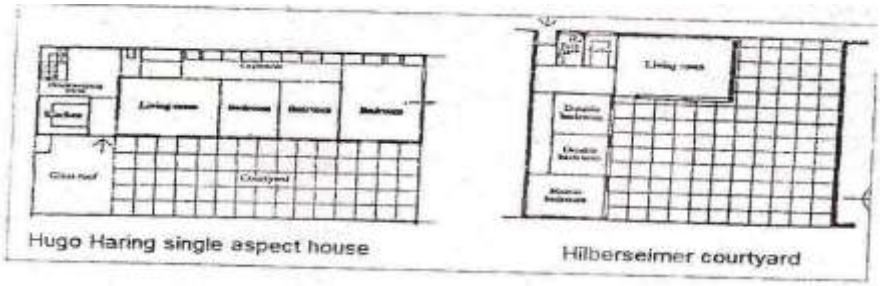


Fig. 8: L shape courtyard houses designed by Harinh and Hilber

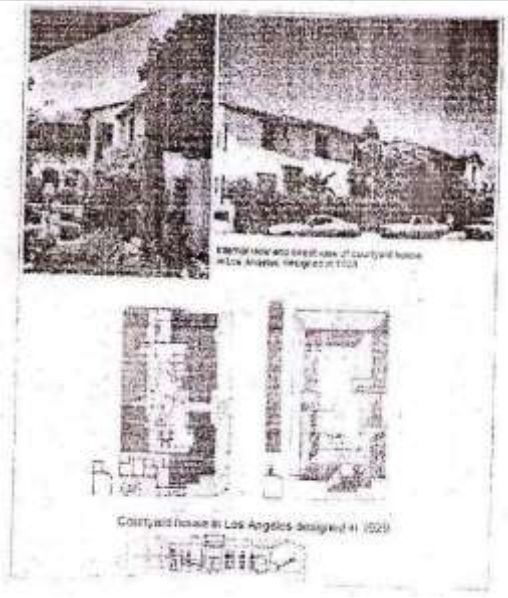


Fig. 9: Courtyard houses in Los Angeles in 1928 – 1929
(Polyzoides et al., 1992)

CONCLUSION

Classical and medievial architecture are resounding bases for the incubation, norturing and stability of modern architecture, especailly in the provision of courtyards. Infact, traditional architecture have over generations provided for courtyards in their respective dwellings, customized to comform to the medievial needs of the people. Cutlure also played a vital role in defining courtyards. This is because, medevial courtyards fully incorporated the cuture of the people in their conceptions, design and execution.

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