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Random Architecture in Third World Comparing with the Random Architectural Development in Yemen

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Abstract: The random architecture is one of the main interest subject related to the third world architecture. The random housing in Yemen, Sana'a city as well as other big cities is mainly affected by several reasons such as industrial activities government planning and conditions. In the present study, the development and growing in random housing, causes, effects, advantages, disadvantages and recommendation as one of the main sectors in Sana'a city are expressed in details with the some properties of the random housing in some other cities in the third world.

Key words: Random architecture, Sana'a architecture, random housing

INTRODUCTION

Random Architecture Phenomena: The problem of random building is usually caused by several reasons such as, the poor living situation, emigration of workers from rural areas to cities. In the third world there are more than one milliard person sever from poor and expected to be increased at 2008 to reach 1.5 milliard person. A large number of people live in big cities, etc. in Mexico about 30 millions person, in Calcutta in India about 20 million person and in Cairo about 20 million person. A considerable number of people in these cities live in terrible situation. There are more than 200 million living in poor civilizing areas around big cities in the grown countries, especially the third world, suffer from bad living situation varied from muddy road surround small huts to the hope of minimum food requirements for children or hiding from catching by policemen due illegal residence (Marilyn, 2003; Saber *et al.*, 2004). In Cairo there are people living with mouse. In Tondo, Manila the workers living in nest from tin. In Yemen the servers are living in nest. Even in India, Bombay and in Asia all are sever from the worst air quality on the earth (Alsaleh, 2004; Saber *et al.*, 2004).

Random housing and living situation: The random housing usually associated with pauperism, which expressed by Robert Malnmar as: the situation which is impossible with it to provide the basic live requirement. Since people living in such areas are all shares the malnutrition, criminality, alienation, lack of service and other civil facilities. These may due the low income and low living level which varied depending on the countries classification. Percentage of death in poor country is 8 times more than rich countries, the illiteracy is about 70% more and the nourishment level in poor countries is 50% less than the acceptable level. Thus the pauperism associated with the random housing in the civilized environment appears in material and moral shape which may be related to the following reasons.

- The industrial events is usually surrounding civilized areas where no acceptable living requirements available.
- Most workers and emigrants come from urban areas leave their original habits and have no chance to gain the new civilized one (Dewsburya *et al.*, 2002; Al-Shareef, 2003; Alneem, 2003).

Random growing phenomena in Yemen: The diffusion of random growing in Yemen may be due the lack in building and the emigration of workers, youth people and farmers with limited income to cities. The low living style usually associated with those people may be related to the belonging of those incomers and emigrants to their original areas living style and their educational levels. The above made each of them not able to has an acceptable or good building, which caused three main phenomena of living in Sana'a city stated as.

- Using areas owned to government, persons, tombs and archeological areas in living, which is called the marginal living.
- Building houses with no license, this is then grown to be sectors, causing random small cities inside and

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Fig. 1: Night City in Sana'a

Fig. 2: The congested housing and buildings contiguity with each other, Sana'a

around the original city to appear, for example the night city in Sana'a, as shown in Fig. 1.

• Building nest or mud hut in many places inside and outside the city.

In general, the three phenomena are differ in area, behavior and style among the different cities depending on the factors affect on worker attraction and the social mode related to the city itself. With respect to Sana'a, the above phenomena assist the development of sectors to be a large storage has the ability to absorb frequent waves of emigrants and the increasing in the price of lands near and in the city center.

Thus the lands owners start to think in investing the lands in one of the following:

• Decrease living land area to be less than the acceptable average level.
• Dividing each building to the largest possible number of living units.
• Increase the number of floors for each unit and increasing the number of rooms in the unit to reach about 44.44 m^2, which eliminate the inner spaces and sometimes the outer spaces associated with low building level and increasing the number of people living in each floor.

The crowding appeared in living due to the above reasons, can be classified into four types: (Lewcock, 1986; John Bower, 2001)

• Living of more than one family in each unit (house).
• Crowding building near each other without any spaces leading to uncomfortable and unhealthy living unit with lack in aeration and normal lighting, Fig. 2.

• Crowding of people inside the building itself due to the increasing of the number of people in each building.
• Crowding of people decrease the area occupied by each person in bedroom and living room.

Reasons lead to appearance of different sectors in Sana'a: Several reasons may participate in the appearance of different sectors in Sana'a city which can be stated as:

• There is no general planes guide the architectural growing of the city frame and decide the type of land's usage and relation between each other. This is leaded to an interaction in using living, industrial and traditional areas.
• The shortcoming in applying the rules of construction, especially in the field of urban planning and the conditions of dividing areas and building system.
• The low rent cost made the owners leave the building without maintenance.
• The confliction in lands and buildings prices without government supervision.
• Occupation or stealing lands of people or governments without government supervision.
• Diminution of the income level leads to crowding in lands and houses.
• Using the area for industrial activity causing pollution due to vapors, gases, noise in additional to the dangerous of fire, traffic jam and random stopping of public transportation and water pollution, unacceptable smells with the appearance of harmful insects and animals.
• Rising the percentage of youth people caused the problems of unemployment and lack in higher education chances.

- The increase in marriage necessitated the search for new house and other requirements.
- The high cost of building's license and the corruptions of some employers, technicians and engineering allow for some mistakes.
- Spreading of stone's saw in center of Sana'a city causes a noise and wastes are noticed with a large amount near buildings.

The advantages of random living: In spite of the disadvantages of random distribution of building it also gives some advantages such as making rebalance in living markets and offering living units suitable for the limited income workers, whom represents one of the public directions trying to have a house within the limitation of government resources which make the workers unable to provide the basic requirements. However, the advantages of random housing can be summarized as:

- Represent the aim of the limited income to provide the basic and necessary requirement of living.
- It represents a strong method for individuals used to solve the problem of housing.
- Such type of housing represents self solution for individual tried to solve their problems in living when the government can't solve it with their limited abilities. So as it is some kind of random enlargements against government resource weakness.

Disadvantages of random living: In case that the government accept the situation of the random housing areas and give it the legality, the government would later establish roads and pavements with sidewalk and provide the general services as water supply, electricity, drainage, waste water and communications. Moreover, the demolishing of such building would be a difficult choice with time from both planning and technical views in additional to the high costs in comparative with the areas grown according to truly specified engineering planes.

The huge amount of violations in the random building areas makes it difficult to develop such areas quickly.

Random housing in third world cities: Nowadays, the random housing phenomena are spread in several cities in the third world. For example, in India, it is estimated that 30% to 40% of the urban population lives in poverty. Ahmedabad city, the India's seventh-largest city, has 2,432 slum pockets, with a population of over 1.2 million. These slums are characterized by crowding and poor environmental health conditions. As well as, another survey on inner city slum in Bangladesh-Dhaka, Thailand-Bangkok, Malaysia-Kuala Lumpur, Pakistan- Lahore and

Brazil-Pôrto Alegre, showed much higher in a poor shantytown than in the more affluent sections of town. In Egypt-Cairo, families are lived on trash heaps and some times in tomb (Daan, 2001; Fry *et al.*, 2002).

Statistical information on the actual living conditions of the urban poor is not easy to come by. Often, official documents are purposefully not explicit. However, a number of studies and surveys of specific settlements do exist (e.g., those of Klong Tuey in Thailand and Manshiet Nasser in Egypt) and more popular publications occasionally report on life and living conditions in the most squalid areas of a city (Sakornpan, 1971; Tekce *et al.*, 1994).

However, the capital Sana'a can be considered as one of the lowest big cities in the world having nest comparing with other cities as Torndo, Manila and Cairo, Egypt, etc. But, Sana'a can be considered as the largest in the unlicensed random buildings which developed to form a city called The night city, in Sana'a. This is due to the large number of unlicensed building built with the unavailability of government at that time spread on large areas on the hills around Sana'a.

Recommendations: Several recommendations aimed to solve the problem of random housing in Sana'a city in Yemen can be stated as:

- Supporting the required technical, economical and engineering planes in dividing and planning the houses and other major projects.
- Submitting the required fund to the town's council by the governments, reducing tax, license cost and demolishing and rebuilding the different sectors.
- Establishing re-housing programs to the people of the demolishing areas.
- Establishing a suitable management system responsible on constructing the projects and encourage the people to participate in such programs.
- Estimating the cost of lands required to be withdrawals for urban planning purpose and give the price according to the new situation after enhancing.

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