Types of Modern Planning of Housing Compounds and its Negative Impact on Climate "Case Study: Almadaneen quarter-Wad Medani-Sudan"

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Abstract: The study discuses the types of modern planning of the housing compounds and its negative impact on climate, through identify the housing compound and its role in building man, architecture and the community and the reduction of the present architectural planning of the housing compounds. Confirming this theoretical side of the study through selecting Almadaneen housing Quarter in Wad Medani town to study, and explain why this Quarter selection in between many housing Quarters.

Along with analyzing the architecture formulas which has lead to the reduction this planning style with its old features, the architecture formulas that have a negative impact on climate and local area, so as to come out with findings that identify the suitable architectural planning in wad Medani town and Almadaneen quarter in particularly and recommendations which will conserve the shape of the urban planning of Madaneen Housing Quarter through times.

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I. Introduction

Modern architecture is based on unguided destructive copying of buildings in different areas without caring about climate and the surrounding environment, Hence we find the same building in Britain in Sudan or Egypt .. etc, In spite of different social needs of people, climate and environment . Through ages so many architects has made studies and cultural lectures to limit these problems, whereas the majority created another justification under the title (domination of the western architectural style against the local one, while others tried to evoke argument about the architectural form in relation to architecture interior design(architectural plan content) , others care about revaluation ugly architectural forms, economic mentality which has contributed in making a big effect in environment and a great damage in climate that was not Observed in economic feasibility study. But in this study we can visualize these negatives , limit the domination of political and economic demands on architecture andbasically adopt the social needs in architectural design.

A- Target of research

1- knowing architectural planning criteria of Wad Medani town.

2- limiting of unguided destructive copying of architectural buildings.

B - The research needs

To develop traditional architecture in Wad Medani

C- The research problem

Lack of available resources

D- The expected results

Knowing the architectural planning form that match Wad Medani town and Almadaneen quarter in especially ,to help preserve and develop it.

II. The Research Method

The researcher has adopted the descriptive and analytical method for this research paper :

Through identify the housing compounds and its role in building man, architecture and community and defining the reduction forms of present architectural planning of the housing compounds with it's bad infect on climate and community. Confirming this theoretical side of the study through selecting Almadaneen housing Quarter in Wad Medani town to study, and explain why this Quarter selection in between many housing Quarters.

Along with analyzing the architecture formulas which has lead to the reduction of this planning style with its old features, the architecture formulas that have a negative impact on climate and local area, so as to come out with findings that identify the suitable architectural planning in wad Medani town and Almadaneen

quarter in particularly and recommendations which will conserve the shape of the urban planning of Madaneen Housing Quarter through times.

III. Theoretical background

A- Definition of Housing Quarter

It is a group of housing quarters axiss by school. (Faroug, Hayder, 2011)

B - The role of Housing Quarters in building man, society, architecture

The housing quarters contribute in making a common referential memory between individuals inclusive with(living modes, dominant cultures, habits ,traditions and contemporary architecture styles. As the architectural designer is individual of society, he is always working on develop the traditional buildings depending modern architectural schools , in order to contribute developing local traditional areas through modern architecture methods.

C- Types of Modern Planning of Housing Compounds and its Negative Impact on Climate

Studying architecture through areas ,regions, countries shows different features between buildings, caused by difference of climate, environment and society demands -e.g. the hot areas are distinguished by low buildings and narrow windows ,while the equatorial areas are distinguished with sloping roofs and wide windows.

-e.g. buildings have traditional architectural features , and converse.

- e.g. buildings integrate with local areas , and converse.

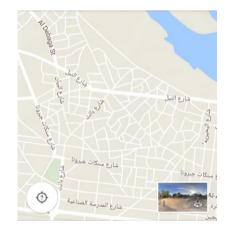
Most architectural planning at present didn't give any consideration about traditional heritage ,climate ,environment and accepted vision to individual, so there is

1-Domenation of western architectural styles to traditional architecture

2- Using machines of high cost to air-condition the interior spaces in buildings , because interior spaces in buildings became uncomfortable.

At this point we can see why there is argument about traditional architecture engineering.

Hence, confirming this theoretical side of the study through selecting Almadaneen housing Quarter in Wad Medani town to study, and explain why this Quarter selection in between many housing Quarters. Along with analyzing it, so as to come out with findings that identify the suitable architectural planning in wad Medani town and Almadaneen quarter in particularly and recommendations which will conserve the shape of the urban planning of Madaneen Housing Quarter through times.



Photo(1) Almadaneen Quarter-Wad Medani town Site Plan Source: Google Earth

AlmadneenQuarter planning is a residential planning based on demands of the society, organic planning as optimally features .These features ensure existence of

a-fully serviced residential quarter inhabited by an unlimited number of people

b- contemporary traditional architecture buildings.

The researcher used many photos of Almadneen quarter, to study and analyz the architecture planning in it, in order to know if it had a bad impact on climate and local area or not . as follows

A- Street planning type

The streets of Almadneen quarter distinguished by its organic architecture planning And the organic planning is most suitable to plan Almadneen Quarter environment because it hot weather, It's reduce exposure to direct

sunlight, dust in the air and works to provide the largest amount of shadows on the streets and buildings and providing cold air,as next photos shown

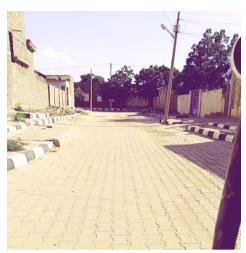


Photo(2) Shadowed Streets in Almadneen Quarter Source :add by author



Photo(4) Cross streetsin Almadneen Quarter Source :add by author

B-Design features and building materials



Photo(3) Closed-end streets in Almadneen Quarter Source :add by author



Photo(5) Shape of Intersection of streets in Almadneen Quarter Source :add by author

The buildings features in Almaden Quarter does not reflect the modern architecture formulas traditionally or contemporary, it's only insure the reduction of architectural forms. Thus, the function of Almadneen organic plan is reduced because its architectural formula that doesn't reflect the organic style and Sudanese heritage on buildings, As shown in follows photos

Types of Modern Planning of Housing Compounds and its Negative Impact on Climate..



Photo(6) Shows reduction of buildings in Almadneen Quarter Source :add by author



Photo(7) Shows Shows lack of interest about coordinating buildings elevations in Almadneen Quarter Source :add by author



Photo(8)Shows walls falling down in Almadneen quarter buildings ,because absence of using modern technology in it. Source :add by author



Photo(9)Shows random usage of building materials Source :add by author

C- The shape of window and building height

Almadneen area is classified as residential Quarter of third class, consist of a- Iow density- two floors height buildings

b- Unique windows styles with square and rectangular shapes making environmental balance in buildings interior spaces.



Photo(10)Shows old traditional windows style in Almaden quarter buildings ,and it has rectangular shape with wooden frame. Source :add by author



Photo(11)Shows rectangular windows model in Almaden quarter buildings Source :add by author



Photo(12) Shows maxim heights of buildings in Almaden quarter Source :add by author

IV. Findings

1- It is important to study climate and environment between areas ,regions, countries before start architectural planning, because it's create a difference between architectural planning shapes.

2- It is necessary to based on social demands in making planning and architectural design.

3- It is import to decorate building elevations through architectural different art styles that express the Sudanese traditional heritage in order to identity Sudanese architecture.

4-We must care about third class Housing Quarters, its protection and development.

V. Recommendations

1- Provide cultural courses in architecture about

a- different art styles that express the Sudanese traditional heritage in order to identify Sudanese architecture, and it's features through times.

b- Almadneen Quarter planning and how to conserve this old housing quarter through times.

2- The legislative bodies are recommended to make laws and regulations to conserve the housing quarters in Wad Medani town and it's development

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