

DESIGN PRINCIPLES OF TOURIST SETTLEMENTS IN THE MEDITERRANEAN-LIKE REGIONS.

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ABSTRACT

In this research, the main attention was given to analyze and understand the relation between the settlement's layout pattern and building form and the traditional values and natural features, likely to be found in the Mediterranean like regions with their particular circumstances. Behind this relationship, the objective was to set-up general criteria for layout pattern and design of tourist settlements in order to create an optimum functional built environment for the touristic demands. For this purpose, the study was completed in two parts of which the first provided a comprehensive understanding to the settlement's layout and design criteria as derived from literature. These criteria have also been tested in a case study area with particular local features, in the second part which has ended by a general conclusion.

INTRODUCTION

Tourist settlements should be comprehensively planned and programmed, to ensure all the necessary facilities in appropriate places, at the right time, and in the correct scale and character. Despite the diversity in the layout patterns and building forms of settlements in certain regions the successful settlements have physical features which in design terms are strong statements and provide clear answers to their respective local demands. But taking the mediterranean regions for example, we still find many settlements are being built with layout patterns and architectural forms which disregard both the natural significance of their sites and residents needs.

THE AIM OF THE RESEARCH

The aim of this research is to develop general principles and guidelines for the layout pattern and design of tourist settlements. These principles would allow optimum environments for tourism to be created, taking into account natural environment, traditions and the property development processes likely to be found in the mediterranean like regions.

RESEARCH METHODOLOGY

To achieve the above aim, the research is designed to study the settlement's layout pattern and building design/ natural constraints and traditions relationship (concerning the mediterranean examples) within a theoretical framework in order to develop a better understanding of the major principles that have to be considered for the design of tourist settlements. These principles are to be examined in a case study area with particular problems on the North West Coast of Egypt (NWC). From this examination, together with the theoretical discussions, the validity of the reached design principles can then be proved and generalised for the Mediterranean regions with similar environmental conditions and localities.

TOURIST SETTLEMENTS DEFINITION

Considering the interest of this research and as reported by researchers and writers, it might be able to provide a specific definition for a tourist settlement. It is the settlement which attract large number of tourists. This attraction can successfully be achieved depending on the way the settlement is planned and designed (with it's features, and

characteristics) on the basis of offering comfortable living conditions in its both indoor and outdoor spaces, expressing the traditional values and physical environment in which it is to be built.

THE FORM OF TOURISM

To plan and design a settlement depending upon touristic development, it may be necessary to understand some about the form of tourism. People may travel from place (country) to another for the sake of religion, or medical treatment or searching for a favorable climatic environment to live in, or attending national and international games. Tourists may also move from their polluted and overcrowded cities (For certain period) to resort areas where they can find places and activities for pleasure. In all cases of these movements, travellers would always like to discover and recognize the culture and traditions of the places they visit. Such culture and traditions can be translated and seen in the layout pattern and architectural form of settlements in which tourists (National and International) are going to accommodate.

THE LAYOUT PATTERN OF A TOURIST SETTLEMENT

Tourist settlements contain many types of buildings and activities. Some of these may be classified as serviced accommodation or self-serviced accommodation, or holiday villages, or individual units (flats and houses) and self-reliant accommodation. The question here is; can we put these different types together with other kind of necessary activities in a layout pattern that can serve the touristic demands? In addition to the quality of services provided, tourists may not like to come again to visit or live in a settlement because of; the difficulties they face to reach and identify their houses and other amenities for which they moved to enjoy with, the adverse effects of the micro climatic conditions and the absence of the required privacy in the settlement's open spaces and buildings. In another settlement the situation may be different when tourists find it easy to identify and recognize the settlement's spaces and practice their activities in comfortable conditions.

The layout pattern of a settlement depends not only on the dimension of putting which in where in plan. It also concern with the total image of the settlement and its different parts to the viewer, both inside and outside the built environment. Lynch, K, (1960) analyzed the image of the built environment into three components; identity, structure, and meaning. In a reality, they always appear together in the visual quality of the whole settlement and that can be held by observers. For the purpose of this paper, the tourist settlements being built for the enjoyment of vast numbers of people, of widely diverse background should be easily recognized and organized in a coherent pattern. This coherent pattern should fulfill the following criteria:

- 1- The total image of the settlement must appear to the observer in an identifiable and remarkable way of an attractive sense.
- 2- It should concentrate on the physical clarity of the settlement in order to allow meaning to develop without our direct guidance, giving the observer the possibility of choice and starting-point for the acquisition of further information.
- 3- It should be the product of both immediate sensation and of the memory of past experience and used to interpret information and to guide action.
- 4- Identify the settlement's parts and groups of buildings and activities.
- 5- Contains a hierarchy of spaces, each has its different shape and form, size, dimensions and type of activities that are practiced in it.
- 6- Provide the peaceful and unpolluted spaces for people of different ages to enjoy their different activities.
- 7- Provide the chance for all open spaces and buildings to be oriented to the natural advantages and protected against the disadvantages of the prevailing climate.
- 8- Achieve the easy movements for both pedestrians and cars.
- 9- Goes in harmony with the surrounding environment and at the same time follows up the planning and building regulations, established by the concerned authorities in terms of population and building densities, heights, lighting, etc.

- 10- Provides the different levels of privacy when and where is necessary for both buildings and activities and open spaces in between.

ARCHITECTURAL FORM AND DESIGN CONCEPTS

Without further justifications, most new solutions can be seen by the residents as depreciated and labeled as architects fancies. The critics may also go to the other extreme and talk about monotony. Both criticisms are often justified, but the disapproval of the public also usually refers to solutions which the architects find positive. Some people thus may ask for architecture which at the same time normal and unusual. They find the old solutions and styles give them the monotonous feeling. Others find the new solutions deny the style and traditions of the beloved architecture of the past with and in which they have grown up and that is why they do not find satisfaction in the so called modern architecture.

However, the satisfaction and dissatisfaction of people with their architecture may be contributed to how much their buildings succeeded to restore them comfortable conditions. In addition to the economic point of view, residents need the architecture which respond to their physical and emotional demands; protecting them from the adverse effects of their environment, providing them with the required privacy, allowing the flexibility of extensions and spaces to be oriented according to the change in the resident's social and economic conditions. Additionally, the produced architecture should be familiar to the residents and appears in an attractive way of identity and organism. Such requirements may be achieved by giving an attention to the following design criteria :

Functional and Spatial Aspect

- Buildings should be designed to;
- keep the privacy to the occupants.
 - achieve the easy use of spaces.

Design Flexibility

buildings should be designed flexible in order to be oriented according to the change of resident's

social and economic needs.

Adaptation to Climate

buildings should be designed, adapted to the prevailing climate, such as air movements and temperature, sun, humidity, rain...etc. in order to allow optimum microclimatic conditions to be created, using the proper design concepts and elements, Figures (1-5).

Buildings and Surrounding Environment

buildings should be designed to;

- be in harmony with the natural levels of topography, Figures (6-8).
- provide the integration between the inside and outside spaces and landscapes.

Planning and Building Regulations

buildings should be designed with respect to the planning and building regulations established for the region in which building is required.

Building Materials and Construction System

the selected structure system should achieve the above criteria and be based on the available local building materials which adapt the prevailing environment and express the local traditional values.

Building Cost

the cost of buildings should be highly considered without ignoring any of the above considerations.

Aesthetic Values

Buildings should be designed to appear in an attractive appearance.

CRITERIA APPLICATION-THE CASE STUDY

The criteria of layout pattern and building form, that have been arrived at in the previous section, are to be examined in one of the tourist settlements,

owned and built by a private cooperative, on the North West Coast (NWC) region of Egypt. The NWC region was selected as one of the most important regions that have been proposed to be exploited in creating new settlements of which the tourist settlements took the largest share of the region's development. The region has a significant natural physical features of topography and climate. The selected settlement has had the satisfaction of the occupants as been identified through a number of field visits operated by the author in summer 1990. Therefore, the extent to which this settlement is designed in response to the traditional and physical characteristics of the region may contribute towards a better understanding of the settlement's configuration and design that could match both the traditional values and environmental features for the mediterranean like regions.

THE SETTLEMENTS PHYSICAL CHARACTERISTICS

The examined settlement is located at about 90 km. from Alexandria city to the west. It was built on an area of about 33 feedans with frontage to the sea with a length of 250 m. and extends inland to the south, some 537 m. It is bordered to the west and east by other cooperatives land property, to the north by the sea and to the south by the existing costal road. The planning and building regulations (established by the NWC comprehensive master plan) controlled the density of built up area with 30% of the total area on which the settlement is to be built. The settlement was built to accommodate about 1500 persons. Buildings of one story (villas) are extending from the sea to inland, about 400 meters, followed by two story villas and which in turn are followed by three story apartments buildings in the southern part of the settlement. In the middle of the settlement, to the east, the recreational and commercial center is planned and designed and served by a road, for cars, surrounding the settlement.

The settlement's site is sloping up from the sea towards inland, to the existing coastal road (which is about 19 m. above sea level). The climate of the site is characterized as relatively hot with intensive relative humidity during summer. The air

temperature reaches 38°C and relative humidity ranges between 70 to 100%. During winter, the area practices much precipitation and air temperature records 9°C during night. Also, the area is subject to the Khamasin wind which blows during April and May, carrying dust and sand from the western desert. The favorite and prevailing wind blows on the site from north and north west direction.

THE SETTLEMENTS LAYOUT PLAN

The settlement's plan, Figure (9), is based on the idea of separating pedestrian movements and cars routes, in order to provide the peaceful and unpolluted outside spaces for the inhabitants to enjoy their time and activities. The site slope was successfully exploited by locating the one story buildings in the front, followed by the two story buildings and three story buildings in the back. The opportunity has been given for most buildings to have the necessary northern summer breezes and enjoy the sea views as well as overlooking the prevailing environment, Figure (10).

The dominating Layout pattern is based upon the court concept, using terraced rows of buildings to form groups, arranged around a pattern of separated open spaces. These produced spaces are accessible to the north and north west from which the summer winds and sea breezes blow, in order to reduce the adverse effects of high relative humidity and air temperature. Additionally, the settlement is protected from the Khamasin winds by a green belt, to the west and south of the site.

The recreational and commercial center is located in the middle to the east of the settlement, to provide the chance for houses and courts to be oriented to the prevailing north west wind and to avoid noise conditions that could be created from such an activity. In addition to the climatic adaptation, this combination of spaces provided the settlement in an identifiable and remarkable way of an attractive fabric.

BUILDING FORM AND DESIGN

All buildings are oriented to the north and north west directions, using wide openings to maximise the benefits of summer air movements. Protection means

against the unwanted sun are also considered using narrow and deeply recessed openings or overshadowing wooden devices, to east, west and south directions, Figure (11). In addition to the climatic modification, using white elevations and stone as the building material, buildings produced the style of architecture which express the traditional touch and goes in harmony with the surrounding environment.

SUMMARY AND CONCLUSION

This research was mainly concerned with analyzing the layout pattern and building form of tourist settlements in relation to their adaptation to the natural significance of their sites and the needs that the residents of tourists may require in their built environment. It was also aimed to conclude general design criteria for the tourist settlements with special attention to the Mediterranean like regions. To achieve this aim the study has been reviewed through literature text in order to identify those mentioned criteria. The concluded criteria were examined in one of the tourist settlements, built on the north west coast of Egypt. The practical output of the study has also supported the success of the design criteria which have been reached out from the theoretical experience.

In conclusion, from the preceding discussions, it can be found out that, the architecture of both theoretical and practical examples illustrated nevertheless common language and features. They all have the Mediterranean character of architecture and each has also the expression of its country and its own traditional values. They all have the architecture of white elevations with pitched roofs sometimes and terraces adapted to the prevailing climate, using wide and narrow openings where is required. The integration between architecture and the physical levels of surrounding topography and plants can also be observed. With this type of architecture tourists can enjoy their living and discover the traditions of the places they visit.

Lastly, some architects appreciate this type of architecture, but others still give no respect and produce the alien architecture which express nothing to its environment.

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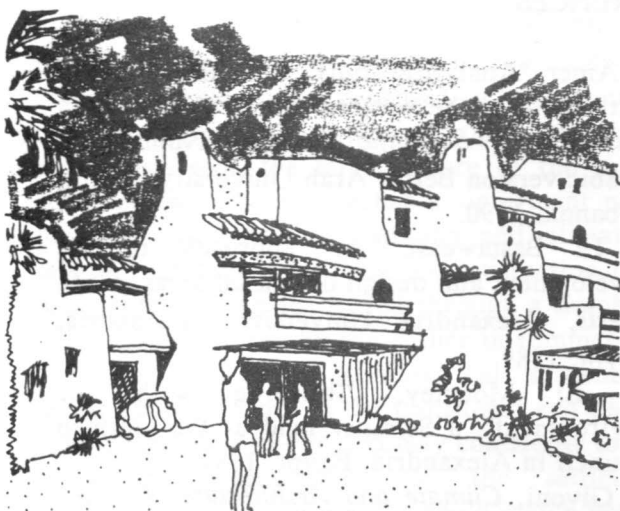


Figure (1) Spain-Coral Beach

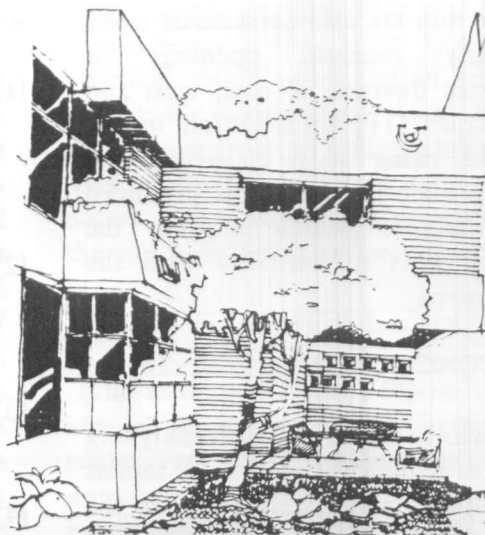


Figure (4) Egypt-King Mariot

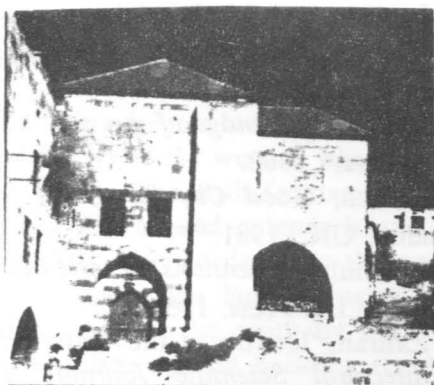


Figure (2) Lebanon-Dier El-Kamar

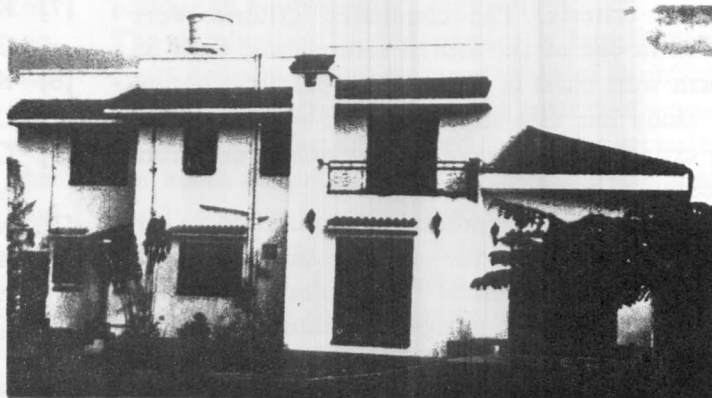


Figure (5) Egypt-King Mariout

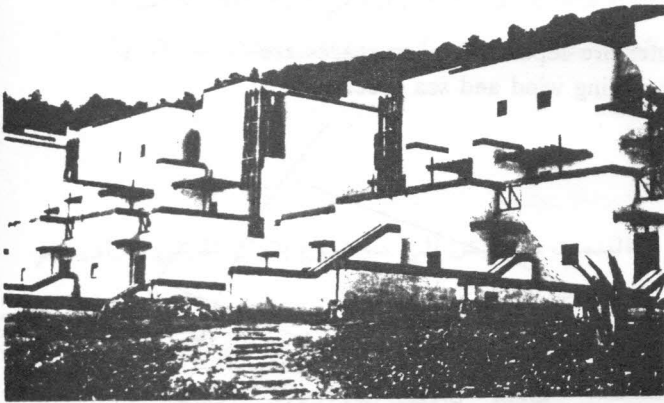


Figure (3) Lebanon-Dier El-Kamar

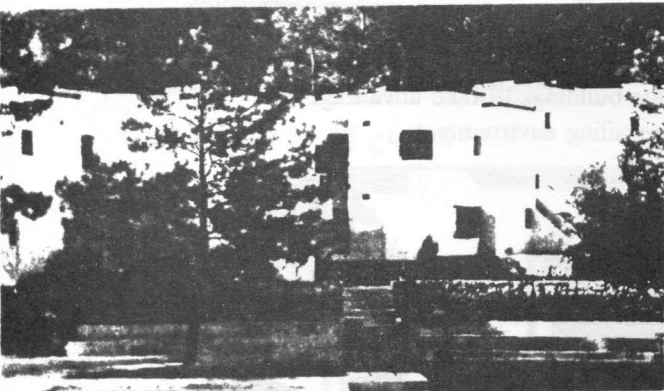
The architectural character unify the Mediterranean look in the general view such as garden, terraces, pergolas, pitched roofs, white elevations with natural building materials related to the natural surrounding.



1-Turkey



2-Turkey



3-Turkey



4-Greece

Figure (6) After Lowson, F., and Bovy, B. (1977)

- 1- The settlement is strongly expressing its regular form, this does not go with the form of topography (the strongest).
- 2+3- The architectural design of buildings and landscapes in an excellent interaction.
- 4- A harmonious and peaceful music of irregular architecture and topography.

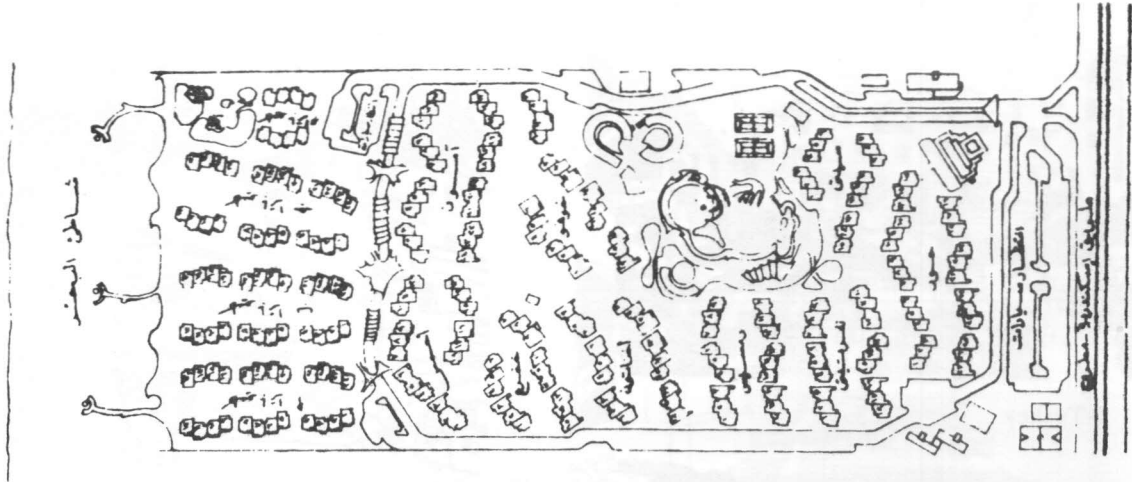


Figure (7) Pedestrian movements and cars routes are separated, open spaces are identifiable and accessible to the prevailing wind and sea breezes.

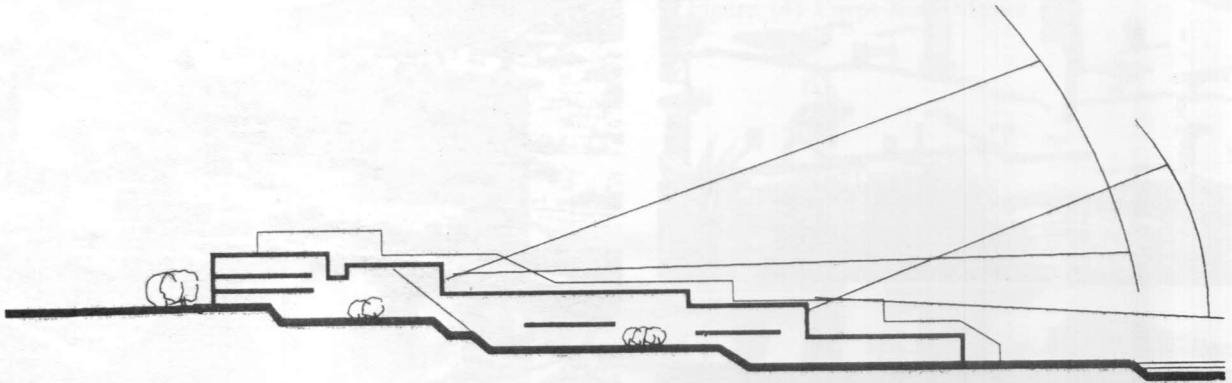


Figure (8) The chance is given to all settlements buildings to take advantage of the sea breezes and overlook the prevailing environment.

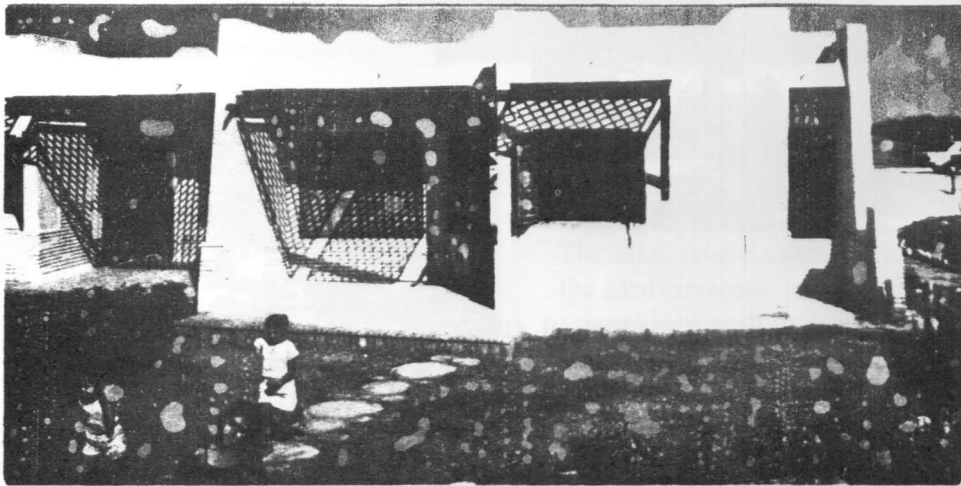


Figure (9) One story buildings with white and natural building materials and over hanging shading devices appear in an integration of new experience in a system of our past and traditional values.